

APPENDIX B

Environmental Findings Memoranda

THIS PAGE INTENTIONALLY LEFT BLANK

To: Emerson Olander, Daniel Kucharski, Stantec

Cc:

From: Tony Omobono, Christopher Nitchie and Karl Seibert, Tetra Tech

Date: April 25, 2019

Subject: DRAFT 90% Design Phase I Soil Environmental Assessment

Introduction

Stantec conducted a subsurface investigation to characterize geotechnical and environmental conditions in the West Lynn Sewer Separation Project (Project) Area (Project Area). This Memorandum presents the results of the investigation thus far in the context of the environmental evaluation of conditions in the project area. The results of the geotechnical investigation conducted concurrently with the environmental investigation are presented in the Geotech Interpretive Report.

The subsurface investigations were observed and documented by Stantec's subcontractor, Tetra Tech, and this memo presents the recorded observations and interpretations of the collected data. The subsurface investigation included advancement of soil borings, collection of soil samples, submittal of soil samples for laboratory analysis, and installation of monitoring wells in a subset of the soil borings advanced. The areal extent of Phase I of the Project is shown on Figure 1 (Phase I Area). The results of the subsurface investigation in Phase I are presented in this Technical Memorandum in support of soil management components of the Design Submittal for Phase I of the Project.

Soil Boring Advancement

From January 8, 2019 through March 11, 2019, New England Boring Company (NEBC), advanced thirteen (13) soil borings (TT-019-G, TT-027-G, TT-028-G, TT-029-G, TT-030-G, TT-031-G, TT-032-G, TT-033-G, TT-034-G, TT-035-G, TT-040-G, TT-055-G, TT-062-G) within the Phase I Area. The boring locations were selected to support the Geotech Interpretive Report, but NEBC also advanced two soil borings (TT-020-G and TT-026-G) and vacuum excavated two soil borings (TT-017-G and TT-018-G) just outside the Phase I Area. Data collected at these locations is considered representative of portions of the Phase I area. NEBC advanced soil borings using the following methodology:

1. Vacuum excavation and hand digging to a depth of approximately eight feet below the ground surface (bgs) or to the water table, whichever was encountered first; and then
2. Soil boring advancement using hollow-stem auger or drive-and-wash drilling technology to a final depth below the anticipated depth of Project work.

Soil samples were collected using a hand auger at one-foot intervals, where possible, during vacuum excavation. Soil samples were collected with a split spoon sampler every five feet during hollow-stem auger or drive-and-wash drilling. Soil borings were advanced to depths ranging from 10 to 32 feet bgs, with the exception of TT-017-G and TT-018-G, which were vacuum excavated to the depth of the water table (approximately 4 to 5 feet bgs) during pre-clearing but have not been advanced beyond the elevation of the groundwater. Drilling to complete these borings to the invert elevation of the proposed pipe is scheduled to occur in conjunction with on-going subsurface investigations for future phases of the Project. Soil borings TT-028-G and TT-031-G were completed

as monitoring wells with 2-inch diameter PVC casing and screen. Monitoring wells were completed with flush-mounted road boxes. Well completion logs are provided in Appendix B.

Tetra Tech personnel observed soil samples collected via hand auger or split spoon, characterized soil type, tested soil headspace for the presence of volatile organic compounds (VOC) using a Photoionization Detector (PID), and collected soil samples for laboratory analysis for geotechnical properties and for the presence of oil and hazardous materials (OHM). The soil boring locations are shown on Figure 1. Soil boring logs from Phase I of the subsurface investigation are provided in Appendix B.

Soil screening was conducted using a PID with a 10.6 electron volt (eV) lamp suitable for measuring headspace offgassing concentrations of VOCs with ionization energy below 10.6 eV. VOC concentrations in soil headspace ranged from 0.0 parts per million by volume (ppmv) to 48.5 ppmv in soil samples collected from Phase I soil borings.

Tetra Tech personnel have selected a limited number of soil samples for laboratory submission based upon PID screening results, visual and olfactory observations, proximity to known or suspected OHM source areas and to provide general project wide coverage. Tetra Tech collected three (3) soil samples within the Phase I area for laboratory analysis. Tetra Tech collected four (4) soil samples from soil borings located just outside the Phase I area, which are considered representative of subsurface conditions within portions of the Phase I area. Collected soil samples were placed in laboratory prepared glassware and transported on ice under a chain of custody to Alpha Analytical of Westborough, Massachusetts (Alpha) for laboratory analysis for one or more of the following: VOCs, semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), total polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH), volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), total MCP 14 metals (antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, silver, thallium, vanadium, zinc) plus copper, reactivity, ignitability, conductivity, and corrosivity. Soil analytical results for these soil samples are discussed below and are presented on Table 1. Analytical laboratory reports are presented in Appendix C.

Former General Electric Facility

The northern portion of Phase I of the Project Area is predominantly covered by the former General Electric (GE) West Lynn Facility. This area encompasses the parcels bounded by Western Avenue, Spencer Street, Waterhill Street, Marion Street, and Centre Street that are currently occupied by a newly-constructed Market Basket grocery store and surrounding parking area, the Lynn Fire Department, and a vacant, paved parcel between Federal Street and Centre Street. An Activity and Use Limitation (AUL) associated with the Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN) 3-0361 is in place to limit exposure to soil in this area. The AUL restricts the activities that may be conducted within the designated area and describes the obligations associated with utilizing or accessing this land. A copy of the AUL for this area is attached in Appendix D. Soil borings proposed to be installed within Federal Street have been delayed while land ownership, AUL restrictions and access coordination are reviewed. OHM conditions within the portion of the Project Area within the GE West Lynn AUL have been characterized based on available historical data gathered as part of response actions undertaken on the former GE West Lynn parcel. Subsurface conditions, including soil characterization, VOC concentrations in soil headspace, OHM concentrations in soil, and water table depth, have been obtained from soil boring logs and data summary tables provided to Stantec by GE.

Summary of Results

For discussion purposes, the Phase I Area has been divided into three sections:

1. *Phase I North* – the area north of Market Square, Western Avenue, and North Common Street;
2. *Phase I Mid* – the area south of Market Square, Western Avenue, and North Common Street and north of South Street Court; and

3. *Phase I South* – the area south of South Street Court to Bennett Street.

The areal extents of these sections are shown on Figure 1. Subsurface conditions in each of these areas are summarized below, with the recommended soil classification for the Project Design.

Design Soil Classification Definitions

Soil in the Project Area will be classified based on the following criteria for the purposes of the Project Design.

Class A-1	Background ¹ : Any soil or fill material which meets the regulatory definition of "Natural Background" as defined in 310 CMR 40.0006.
Class A-2	Impacted: Any soil or fill material which contains OHM at concentrations greater than Natural Background levels but less than release notification thresholds established by 310 CMR 40.0300 and 40.1600.
Class B-1	Contaminated: Soil or fill material that meet all applicable criteria (i.e., COMM 97-001 and/or facility-specific permit requirements) for off-site reuse as daily cover, intermediate cover, or pre-cap contouring material at in-state <u>unlined</u> landfills.
Class B-2	Contaminated: Soil or fill material that meet all applicable criteria (i.e., COMM 97-001 and/or facility-specific permit requirements) for off-site reuse as daily cover, intermediate cover, or pre-cap contouring material at in-state <u>lined</u> landfills.
Class B-3	Contaminated: Soil or fill material that meet all applicable criteria for in-state recycling at an asphalt batching plant and/or the specific licensing requirements for the proposed in-state recycling facility.
Class B-4	Contaminated: Soil and fill material that contain concentrations of contaminants that exceed in-state, lined, and unlined landfill reuse criteria as well as in-state recycling acceptance criteria, but meet the criteria for regional thermal treatment facilities of out-of-state recycling facilities, and are not classified as a Resource Conservation and Recovery Act (RCRA) Hazardous Waste.
Class B-5	Contaminated: Soil and fill material that contain concentrations of contaminants that require removal to regional disposal facilities and are not classified as RCRA Hazardous Waste.
Class B-6	Contaminated: Soil and fill which does not meet one of the designations above due to excessive foreign materials and/or debris that are not classified as a hazardous waste.
Class C-1	Hazardous Waste: Soils classified as hazardous waste that can be readily treated on-site to eliminate the toxicity characteristic (e.g., for lead).
Class C-2	Hazardous Waste: Material determined to contain "listed" or "characteristic" hazardous waste constituents which cannot be readily treated on-site. This material must be transported to an out-of-state approved RCRA Subtitle C hazardous waste disposal or treatment facility under a Uniform Hazardous Waste Manifest.

1 - Background soils in this evaluation do not include anthropogenic fill; however, opportunities to characterize impacted or contaminated soil as background during construction may exist based upon available MassDEP guidance documents. Classification of soil as Background is not intended to imply that soils may be re-used in an unrestricted manner.

Phase I North

Phase I North is characterized by soil observed in borings PDR-001, TT-031-G, TT-032-G, and TT-055-G. Soil borings were not advanced in the portion of the Phase I North area within the AUL, which primarily includes Federal Street north of Western Avenue. Soil samples collected from PDR-001, TT-031-G, TT-032-G, and TT-055-G were not among those selected for laboratory analysis; therefore, OHM interpretations in this area rely heavily on historical data provided by GE from response actions conducted at the GE West Lynn site. Tetra Tech reviewed a total of 69 soil samples from soil borings located near either Federal Street or Centre Street. The reported results were compared to soil classification criteria. While these soil samples were not collected from within Federal Street or Centre Street, taken together they provide a general description of conditions within the Federal Street and Centre Street corridors. Soil samples reviewed are listed in Table 2 below, along with the recommended soil classification for each soil sample. Supporting documents for data provided by GE, including a figure presenting the locations of the referenced soil borings, are provided in Appendix E.

Overall, 4 soil samples reportedly met requirements for Class A-1, 57 soil samples met the requirement for Class A-2, 6 soil samples met the criteria for Class B-1, and two soil samples met the criteria for Class B-2. For the purposes of soil classification OHM identified within Phase I are assumed to not represent listed or characteristic hazardous wastes. Historical Contained-In Determinations for chlorinated VOCs associated with RTN 3-0361 are recorded with the MassDEP and none of the soil analytical data reviewed indicated the presence of characteristic hazardous waste. Based on the proposed excavation activities within and proximate to the Federal Street General Electric disposal Site, Contained-In Determinations may be necessary for chlorinated VOCs identified in soil and groundwater within Phase I to be disposed of as non-hazardous wastes. Based on these results, and the assumption that Contained-In Determinations will be approved by the MassDEP resulting in no hazardous wastes being generated from this area, soil in Phase I North are recommended to be characterized primarily as Class A-2 and B-1 with the potential for limited areas of B-2 and B-3 classified soils. Six soil samples had reported concentrations of metals or VOCs that exceeded MassDEP's Reportable Concentrations (Class B-1 soils). . Two soil samples located near the northwest end of Federal Street had reported concentrations of petroleum compounds that exceeded reuse criteria in unlined in-state landfills (Class B-3 soils). Limited areas of petroleum-impacted soils may be encountered that require characterization as Class B-2 soils.

Table 2 Summary of Soil Analytical Data Provided by General Electric

Street	Soil Boring	Depth	Detected OHM	Soil Classification ^{2, 3}
Federal Street	W-1	1-2.5	Cadmium, chromium, nickel, 1,1,1-TCA, TCE, PCE	Class A-2
Federal Street	W-1	5-6.5	chromium, nickel, TCE	Class A-2
Federal Street	W-1	10-11.5	chromium, nickel	Class A-2
Federal Street	W-2	1-2.5	chromium, nickel, 1,1,1-TCA, TCE	Class A-2
Federal Street	W-2	5-6.5	chromium, nickel, TCE	Class A-2
Federal Street	W-2	10-11.5	chromium, nickel	Class A-2
Federal Street	W-3	1-2.5	chromium, nickel, TCE, PCE	Class A-2
Federal Street	W-3	5-6.5	chromium, nickel, TCE	Class A-2
Federal Street	W-3	10-11.5	chromium, nickel	Class A-2
Centre Street	W-4	1-2.5	chromium, nickel	Class A-2

Street	Soil Boring	Depth	Detected OHM	Soil Classification ^{2, 3}
Centre Street	W-4	5-6.5	chromium, nickel	Class A-2
Centre Street	W-4	10-11.5	chromium, nickel, 1,1,1-TCA	Class A-2
Federal Street	B-5	1-2.5	chromium, nickel	Class A-1
Federal Street	B-5	5-6.5	chromium, nickel	Class A-2
Federal Street	B-5	10-11.5	chromium, nickel	Class A-2
Western Avenue	B-6	1-2.5	Cadmium, chromium, nickel, 1,1,1-TCA, TCE, PCE	Class B-1
Western Avenue	B-6	5-6.5	chromium, nickel, TCE	Class A-2
Western Avenue	B-6	10-11.5	chromium, nickel	Class A-2
Centre Street	B-8	1-2.5	chromium, nickel, 1,1,1-TCA, TCE, methylene chloride	Class B-1
Centre Street	B-8	5-6.5	Cadmium, chromium, nickel, 1,1,1-TCA, TCE	Class B-1
Centre Street	B-8	10-11.5	Cadmium, chromium, nickel, TCE	Class A-2
Centre Street	B-10	1-2.5	chromium, nickel	Class A-2
Centre Street	B-10	5-6.5	chromium, nickel	Class A-2
Centre Street	B-10	10-11.5	chromium, nickel, 1,1,1-TCA, TCE	Class A-2
Federal Street	SB-11	11	TPH	Class A-2
Federal Street	SB-11	17	VOCs	Class A-2
Federal Street	HA-5	0.5-1	Antimony	Class A-2
Federal Street	HA-5	4-6	Arsenic	Class B-1
Federal Street	HA-8	0.5-1	Beryllium	Class A-2
Federal Street	HA-8	4-6	Beryllium, cadmium	Class A-2
Federal Street	HA-11	0.5-1	Antimony, lead	Class A-2
Federal Street	HA-11	4-6	Antimony	Class A-2
Federal Street	HA-14	0.5-1	Lead	Class A-2
Federal Street	HA-14	4-6	Lead	Class A-2
Centre Street	SS-19	5-7	Cadmium, zinc	Class A-2
Centre Street	SS-20	0-2	Cadmium	Class A-2
Centre Street	SS-20	5-7	Zinc	Class A-2
Centre Street	SS-20	8-10	Nickel	Class A-2

Street	Soil Boring	Depth	Detected OHM	Soil Classification ^{2, 3}
Centre Street	SS-20	10-12	Nickel	Class A-2
Centre Street	SS-21	5-7	Cadmium, nickel	Class A-2
Federal Street	SS-25	5-7	Cadmium, chromium	Class A-2
Centre Street	SS-29	0-2	Mercury	Class A-2
Centre Street	SS-29	5-7	Cadmium, mercury, nickel, cyanide	Class A-2
Centre Street	SS-29	10-12	Cadmium, chromium, nickel	Class A-2
Centre Street	SS-35	0-2	Nickel	Class A-2
Centre Street	SS-35	5-7	Cadmium, lead, nickel	Class B-1
Centre Street	SS-35	10-12	Metals below background	Class A-1
Centre Street	SS-36	5-7	Nickel	Class A-2
Centre Street	SS-42	5-7	Cadmium, nickel	Class A-2
Centre Street	SS-43	5-7	Metals below Reportable Concentrations	Class A-2
Federal Street	SS-47	4-6	Nickel	Class A-2
Federal Street	SS-47	9-11	Nickel	Class A-2
Federal Street	SS-48	4-6	Nickel	Class A-2
Federal Street	SS-49	7-9	Metals below Reportable Concentrations	Class A-2
Centre Street	SS-52	4-6	Nickel	Class A-2
Centre Street	SS-53	4-7.5	Cadmium, mercury, zinc	Class A-2
Federal Street	SS-55	4-6	Metals below Reportable Concentrations	Class A-2
Federal Street	SS-56	4-6	Cadmium, nickel	Class A-2
Federal Street	SS-57	4-6	Nickel	Class A-2
Centre Street	SS-63	9-11	Mercury	Class A-2
Federal Street	SS-66	4-6	Mercury, nickel	Class A-2
Federal Street	SS-67	4-6	Nickel	Class A-2
Centre Street	SS-69B	4-6	Nickel	Class A-2
Centre Street	SS-70B	0-2	Cadmium, lead, mercury	Class B-1
Centre Street	SS-70C	8-10	Cadmium, nickel	Class A-2
Federal Street	B-16	5-6.5	None reported	Class A-1
Federal Street	B-16	11-12.5	Mineral spirits	Class B-2
Federal Street	B-20	6.5-8	Fuel oil/PAHs	Class B-2

Street	Soil Boring	Depth	Detected OHM	Soil Classification ^{2, 3}
Federal Street	B-20	9.5-11	None reported	Class A-1

2- Soil Classifications based upon Reportable Concentrations published in the April 25, 2014 version of the Massachusetts Contingency Plan (310 CMR 40.00).

3 – For the purposes of soil classification OHM identified within Phase I are assumed to not represent listed or characteristic hazardous wastes. Historical Contained-In Determinations for chlorinated VOCs associated with RTN 3-0361 are recorded with the MassDEP. Contained-In Determinations may be necessary for chlorinated VOCs identified in soil and groundwater within Phase I and MassDEP approval may be necessary to avoid the need to dispose of OHM containing wastes as Class C listed hazardous wastes.

Phase I Mid

Phase I Mid is characterized by soil observed from PDR-003, TT-028-G, TT-029-G, TT-030-G, TT-035-G, TT-061-G, and TT-062-G. Soil headspace concentrations in soil samples from these soil borings ranged from 0.0 ppm to 1.5 ppm.

Groundwater in the Phase I Mid area of the project was identified at between 6 and 10 feet bgs. Unsaturated soil (i.e., above the water table) in the area designated Phase I Mid is characterized by two soil samples: TT-028-G (3-4') and TT-061-G (4-5'). TT-028-G (3-4') had detected concentrations of acetone and trichloroethylene at concentrations below Massachusetts Department of Environmental Protection (MassDEP) Reportable Concentrations, and detected concentrations of total metals consistent with MassDEP's published background concentrations. TT-061-G (4-5') was analyzed for VPH and EPH only, which were not detected.

Deeper, saturated soil in the area designated Phase I Mid is characterized by soil sample TT-035-G (14-16'). TT-035-G (14-16') had detected concentrations of trichloroethylene at a concentration below MassDEP's Reportable Concentration, and detected concentrations of total metals consistent with MassDEP's published background concentrations for natural soils.

Soil boring TT-062-G was advanced within South Street adjacent to 99 South Street that has an AUL recorded to restrict access to soil at that property due to a historical release of heating oil beneath the residential building on the property. No staining, odors, or other evidence of petroleum impacts to the soil beneath South Street were observed. Soil headspace monitoring found VOC concentrations ranging from 0.0 ppm to 0.4 ppm, which further supports the observation that petroleum impacts related to the historical release of heating oil at 99 South Street have not been identified beneath South Street.

Soil in Phase I Mid are generally recommended to be characterized as Class A-2, due to no visual, olfactory or soil headspace evidence of impacts, and based on concentrations of VOCs present in both shallow and deeper soil above the background concentration, which is defined as the laboratory reporting limit for VOCs.

Phase I South

Phase I South is characterized by soil observed from PDR-007, TT-017-G, TT-018-G, TT-019-G, TT-020-G, TT-026-G, TT-027-G, TT-033-G and TT-034-G. Soil headspace concentrations in soil samples from these soil borings ranged from 0.0 ppm to 48.5 ppm. Maximum soil headspace concentrations were encountered in unsaturated soil at TT-027-G, approximately 0 to 10 feet bgs. Additional soil with headspace concentrations greater than 10 ppm was encountered at TT-020-G below 20 feet bgs and at TT-033-G (1-2').

Unsaturated soil (i.e., above the water table) in the area designated Phase I South is characterized by two soil samples located just outside of Phase I South: TT-017-G (3-5') and TT-018-G (0-5'). TT-017-G (3-5') had

detected concentrations of acetone and methyl ethyl ketone at concentrations below MassDEP Reportable Concentrations, and detected concentrations of total metals consistent with MassDEP's published background concentrations. TT-018-G (0-5') had detected concentrations of acetone and total petroleum hydrocarbons at a concentration below MassDEP Reportable Concentrations and lead at a concentration that exceeded MassDEP's published background concentration. The detected lead was further analyzed for Toxicity Characteristic Leaching Potential (TCLP) lead. TCLP lead was not detected at the laboratory reporting limit indicating that this soil did not meet the leachable lead criteria for characteristic hazardous waste. TT-018-G (0-5') also had detected concentrations of PAHs and metals other than lead consistent with MassDEP's published natural background concentrations.

Soil at the water table is characterized by soil sample TT-026-G (7-9') located just outside of Phase I South. TT-026-G (7-9') had detected concentrations of tetrachloroethylene and 1,2,4-trimethylbenzene at concentrations below MassDEP Reportable Concentrations, and detected concentrations of total metals consistent with MassDEP's published background concentrations.

Deeper, saturated soil in the area designated Phase I South is characterized by soil sample TT-020-G (25-27') located just outside Phase I South. Headspace screening of soil below 25 feet bgs identified the potential for the presence of VOCs in soil sample TT-020-G (25-27') , prompting submission of the sample for laboratory analysis of VOCs only. VOCs were not identified at concentrations above laboratory detection limits in TT-020-G (25-27').

Soil in Phase I South are generally recommended to be characterized as Class A-2 or Class B-1. TT-017-G (3-5') and TT-026-G (7-9') meet the criteria for Class A-2 soil due to no visual, olfactory or soil headspace evidence of impacts, and based on concentrations of VOCs above the background concentration.. TT-018-G (0-5') meets the criteria for Class B-1 soil due to the presence of lead above the MassDEP Reportable Concentration with TCLP lead reported to be below laboratory detection limits. The soil sample collected from TT-020-G (25-27') is classified as A-1 because OHM at concentrations above natural background have not been identified; however, this soil sample was run for a limited analyte list that does not include metals therefore this sample provides insufficient evidence of the presence of A-1 soils within the southern portion of Phase I. Soils that do not meet the natural background standards might still be eligible for future characterization as anthropogenic background based upon available MassDEP guidance documents.

Environmental Management of Excavations

Based upon the industrial history in portions of the recommended Project Area, soil and groundwater information provided by GE, and the results of the subsurface investigation conducted by Stantec, it is anticipated that contaminated soil and groundwater will require management during project construction. In areas where no evidence of OHM releases are identified it is anticipated that soil excavated during utility trenching will be reused as backfill in the same trench, provided that it meets geotechnical requirements. Soils excess to an area of the project will require environmental characterization prior to reuse in another area of the project or prior to off-site reuse or disposal. An estimate of the volume of soil anticipated to be generated during various segments of the Project will be calculated as a component of the final design process and may be utilized along with soil classifications to estimate soil disposal costs.

All soils excess to any project area will require environmental characterization by the contractor during the construction phase. Segments of the project where soil characterization is conducted prior to utility installation will allow for additional flexibility regarding reuse and disposal options. Soil characterization can include, in part, information gathered during Stantec's subsurface investigation, presented herein. For soils scheduled to be characterized ex-situ during the construction phase, appropriate lay down areas for soil stockpiles should be established as a part of the construction sequencing.

Groundwater management should also be considered as a component of the final design. In various segments of the project, groundwater recharge and/or groundwater treatment and discharge under a NPDES permit may be desired. It is also anticipated that containment and off-Site disposal of groundwater may be economical in some segments of the project.

In those areas of the project where OHM impacts are identified, specific soil and groundwater management procedures should be established. The Project design for the Phase I Area includes trench excavation through an AUL area that covers Federal Street north of Western Avenue. The AUL is the result of response actions conducted by GE at their former manufacturing facility located at 40 Federal Street. Releases of VOCs, SVOCs, petroleum hydrocarbons, pesticides and metals reportedly occurred at this facility. An AUL has been implemented for portions of the property and a groundwater pump and treat system is reported to be actively operating at the Site to mitigate the downgradient migration of contaminants originating at the Site. The Project design layout includes utility installation in Federal Street within the boundaries of this Disposal Site including installation through areas with AULs. Excavation in these areas is anticipated to require the preparation and submission to the MassDEP of a Utility-Related Abatement Measure (URAM). Additionally, groundwater dewatering conducted in or around this property will need to account for the groundwater contaminants likely to be encountered and may need to be performed in coordination with operations of the groundwater pump and treat system. Additional investigation and coordination of specific mitigation measures will be necessary in the various regions of this Disposal Site throughout the design and construction phases of the Project. It is anticipated that installation of utilities through and adjacent to this property will likely result in additional planning and coordination costs relative to other segments of the project. Additional costs may include pre-characterization costs, health and safety assessments, preparation of URAM related documentation, groundwater dewatering treatment and assessment costs and higher soil disposal costs. An assessment as to whether it is feasible to avoid this segment of the proposed Project Area that presents atypical environmental related demands is recommended. It is expected that environmental impacts in this area may influence minor design adjustments, such as increasing pipe elevations within this parcel to reduce groundwater dewatering.

Groundwater and Construction Dewatering

Dewatering will be required for the installation of the pipeline. It is anticipated that the Project will require the Contractor to control water seepage, precipitation, groundwater infiltration, and surface water inflow within the excavations and site at all times to minimize subgrade disturbance, maintain integrity of soil surfaces, and permit foundation and structure construction to proceed in-the-dry. The volume of groundwater managed in various segments of the project may be reduced if it is not necessary to install the utilities in-the-dry. Dewatering depths will be dictated by the final design requirements.

It is anticipated that, in most project segments, dewatering can be accomplished by open pumping from shallow or deep wells or well points and sumps within the excavation. Groundwater discharge and off-site disposal of sediment or containerized groundwater where necessary, should comply with applicable permits and Federal, State and Local regulations.

Groundwater is present at approximately 10 feet bgs in the vicinity of the former GE West Lynn Facility, in the area identified as Phase I North on Figure 1. Groundwater is present at approximately 8 to 10 feet bgs in the area between the GE West Lynn Facility and Summer Street and at approximately 4 to 8 feet bgs in the area south of Summer Street to Bennett Street.

Groundwater flow is generally east to west at the former GE West Lynn Facility. Groundwater flow turns to the south in the southwest corner of the former GE West Lynn Facility. Groundwater flow is generally to the south and south-southeast in the Phase I Mid and Phase I South areas.

Groundwater samples have not been collected as part of the Project subsurface investigation conducted to date. However, chlorinated VOCs are known to be present in groundwater within the Phase I Area based on historical groundwater monitoring conducted by GE. In the most recent groundwater monitoring event, conducted by GE in October 2018, chlorinated VOCs were detected in groundwater samples collected from monitoring wells on South Common Street and Elm Street, which are located more than 500 feet south of the Former GE West Lynn Facility.

Active remediation systems include a groundwater extraction system (GES) and a groundwater treatment system (GTS) to maintain hydraulic containment to prevent additional off-site migration of chlorinated VOCs. A product-only recovery system was formerly used to recover fuel oil in the vicinity of former underground storage tanks.

According to the description provided in the February 2019 *Remedy Operation Status Report* (Tetra Tech 2019), four source areas were identified at the GE West Lynn Facility. Areas 1, 2, and 3 are located on the parcel west of Federal Street. Area 4 is located in the southwest corner of the east parcel, near the traffic circle at the intersection of Federal Street, Western Avenue, North Common Street, and South Street. Figures from the February 2019 *Remedy Operation Status Report* are included in Appendix E.

Based on the information available in the February 2019 *Remedy Operation Status Report*, it should be assumed that chlorinated VOCs may be encountered in groundwater during construction activities throughout the Phase I Area. If construction activities require dewatering, groundwater pumped from excavated areas must be managed in accordance with applicable permits. Groundwater dewatering throughout the Phase I area should be conducted in a manner that does not risk mobilizing the existing VOC's contaminant plume or altering the capture of VOCs by the active groundwater extraction system operation. It is anticipated that coordination with GE and the operators of their GES and GTS will be necessary during groundwater dewatering operations conducted within the Phase I project area. Historical data for the GES and GTS on the MassDEP website <https://eeaonline.eea.state.ma.us/portal#!/search/wastesite> under RTN 3-0361.

Attachments

Table 1 – Soil Analytical Data

Figure 1 – Phase I Soil Classification

Appendix A - Limitations

Appendix B – Soil Boring Logs and Groundwater Monitoring Well Diagrams

Appendix C – Laboratory Analytical Reports

Appendix D – Activity and Use Limitation – General Electric West Lynn Site – RTN 3-00361

Appendix E – Supporting Documents Provided by General Electric

References

Calacone, Matthew (General Electric). Email to Chris Nitchie (Tetra Tech), March 22, 2019. Includes historical soil and groundwater results, boring logs, and figures from historical environmental reports.

Tetra Tech, Inc. *Remedy Operation Status Report, Quarter 2 and 3, 2018, GE Aviation – West Lynn Site, 40 Federal Street, Lynn, MA 01905, MassDEP Release Tracking Number 3-0361*. February 1, 2019.

P:\54675\200-54675-18002\DOCS\REPORTS\RAC\PHASE I AND PHASE II SUMMARY DRAFT\ENVIRONMENTAL MEMO - PHASE I AREA.DOCX

Attachments

THIS PAGE INTENTIONALLY LEFT BLANK

Table 1	Soil Analytical Data (mg/kg)														
Location:	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN						
Sample Name:	TT-018-G (0'-5')	TT-026-G (7'-9')	TT-039-G (3'-4')	TT-020-G (25'-27')	TT-035-G/14-16	TT-061-G/4-5	TT-028-G (3-4')	TT-056-G (1-5')	TT-017-G/3-5			(2)	(2)	(3)	(3)
Sample Depth:	0-5'	7-9'	3-4'	25-27'	14-16'	4-5'	3-4'	1-5'		2014	2014	Approved	Approved	DEP Published	DEP Published
Laboratory:	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	MCP	MCP	Reuse Levels	Reuse Levels	Background	Background
Laboratory I.D.:	L1902454-01/D,	L1902454-02	L1902454-03/D	L1902454-04	L1903964-02	L1903964-04	L1906644-01	L1906644-02	L1907670-02			Unlined	Lined	Levels for	Levels for
Sample Date:	01/10/2019	01/11/2019	01/11/2019	01/14/2019	01/17/2019	01/17/2019	02/19/2019	02/19/2019	02/26/2019	RCS-1	RCS-2	Landfill	Landfill	Metals & PAHs	Metals & PAHs
Consultant:	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	mg/kg	mg/kg	mg/kg	mg/kg	Fill with Ash	Natural Soil
Map Grid:	4E	4E	4E	4E	3D	2E	3E	3D	4F	(1)	(1)				
Acetone	0.019	<0.0078	0.98	<0.73	<0.0075	<0.152	0.03	0.02	0.07	6	50				
Benzene	<0.00027	<0.00039		<0.036	<0.00038		<0.0004	<0.00059	<0.00033	2	200				
Bromobenzene	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	100	1,000				
Bromodichloromethane	<0.00027	<0.00039		<0.036	<0.00038		<0.0004	<0.00059	<0.00033	0.1	0.1				
Bromoform	<0.0021	<0.0031		<0.29	<0.003		<0.0032	<0.0048	<0.0026	0.1	1.0				
Bromomethane	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	0.5	0.5				
Butanone, 2- (MEK)	<0.0054	<0.0078		<0.73	<0.0075		<0.008	<0.012	0.014	4.0	50				
Butylbenzene, tert-	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	100	1,000				
Carbon disulfide	<0.0054	<0.0078		<0.73	<0.0075		<0.008	<0.012	<0.0066	100	1,000				
Carbon Tetrachloride	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	5	5				
Chlorobenzene	<0.00027	<0.00039		<0.036	<0.00038		<0.0004	<0.00059	<0.00033	1	3				
Chloroethane	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	100	1,000				
Chloroform	<0.0008	<0.0012		<0.11	<0.0011		<0.0012	<0.0018	<0.00099	0.2	0.2				
Chloromethane	<0.0021	<0.0031		<0.29	<0.003		<0.0032	<0.0048	<0.0026	100	1,000				
Chlorotoluene, o-	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	100	1,000				
Dibromo-3-chloropropane, 1,2-	<0.0016	<0.0023		<0.22	<0.0022		<0.0024	<0.0036	<0.002	10	100				
Dibromochloromethane	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	0.005	0.03				
Dibromoethane, 1,2-	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	0.1	0.1				
Dibromomethane	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	500	5,000				
Dichlorobenzene, 1,2- (o-DCB)	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	9	100				
Dichlorobenzene, 1,3- (m-DCB)	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	3	200				
Dichlorobenzene, 1,4- (p-DCB)	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	0.7	1				
Dichlorodifluoromethane	<0.0054	<0.0078		<0.73	<0.0075		<0.008	<0.012	<0.0066	1,000	10,000				
Dichloroethane, 1,1-	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	0.4	9				
Dichloroethane, 1,2-	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	0.1	0.1				
Dichloroethene, 1,1-	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	3	40				
Dichloroethene, cis-1,2 -	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	0.1	0.1				
Dichloroethene, trans-1,2-	<0.0008	<0.0012		<0.11	<0.0011		<0.0012	<0.0018	<0.00099	1	1				
Dichloropropane, 1,2-	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	0.1	0.1				
Dichloropropane, 1,3-	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	500	5,000				
Dichloropropene, cis-1,3-	<0.00027	<0.00039		<0.036	<0.00038		<0.0004	<0.00059	<0.00033	0.01	0.4				
Dichloropropene, trans-1,3-	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	0.01	0.40				
Dioxane, 1,4-	<0.054	<0.078		<7.3	<0.075		<0.08	<0.12	<0.066	0.2	6				
Ethyl ether	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	100	1,000				
Ethylbenzene	<0.00054	<0.00078	<0.952	<0.073	<0.00075	<0.152	<0.0008	<0.0012	<0.00066	40	1,000				
Hexachlorobutadiene (hexachloro-1,3-butadiene)	<0.0021	<0.0031		<0.29	<0.003		<0.0032	<0.0048	<0.0026	30	100				
Hexanone, 2-	<0.0054	<0.0078		<0.73	<0.0075		<0.008	<0.012	<0.0066	100	1,000				
Isopropylbenzene	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	1,000	10,000				
Isopropyl ether	<0.0011	<0.0016	<0.476	<0.14	<0.0015	<0.076	<0.0016	<0.0024	<0.0013	100	1,000				
Methyl tert-butyl ether	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	0.1	100				
Methyl-2-pentanone, 4-	<0.0054	<0.0078		<0.73	<0.0075		<0.008	<0.012	<0.0066	0.4	50				
Methylene chloride (Dichloromethane)	<0.0027	<0.0039		<0.36	<0.0038	<0.304	<0.004	<0.0059	<0.0033	0.1	4				
Naphthalene	0.0022	<0.0031	<1.90	<0.29	<0.003		<0.0032	<0.0048	<0.0026	4	20				
Styrene	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	3	4				
Tetrachloroethane, 1,1,1,2-	<0.00027	<0.00039		<0.036	<0.00038	<0.152	<0.0004	<0.00059	<0.00033	0.1	0.1				
Tetrachloroethane, 1,1,2,2-	<0.00027	<0.00039		<0.036	<0.00038		<0.0004	<0.00059	<0.00033	0.005	0.02				
Tetrachloroethene	<0.00027	0.00053		<0.036	<0.00038		<0.0004	<0.00059	<0.00033	1	10				
Tetrahydrofuran	<0.0021	<0.0031		<0.29	<0.003		<0.0032	<0.0048	<0.0026	500	5,000				
Toluene	<0.00054	<0.00078	<0.952	<0.073	<0.00075	<0.152	<0.0008	<0.0012	<0.00066	30	1,000				
Trichlorobenzene, 1,2,4-	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	2	6				
Trichloroethane, 1,1,1-	<0.00027	<0.00039		<0.036	<0.00038		<0.0004	<0.00059	<0.00033	30	600				
Trichloroethane, 1,1,2-	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	0.1	2				
Trichloroethene	<0.00027	<0.00039		<0.036	0.001		0.0005	<0.00059	<0.00033	0.3	0.3				
Trichlorofluoromethane	<0.0021	<0.0031		<0.29	<0.003		<0.0032	<0.0048	<0.0026	1,000	10,000				
Trichloropropane, 1,2,3-	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	100	1,000				
Trimethylbenzene, 1,2,4-	<0.0011	0.0024		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	1,000	10,000				
Trimethylbenzene, 1,3,5-	<0.0011	<0.0016		<0.14	<0.0015		<0.0016	<0.0024	<0.0013	10	100				
Vinyl chloride	<0.00054	<0.00078		<0.073	<0.00075		<0.0008	<0.0012	<0.00066	0.7	0.7				
Xylene (total)	<0.00054	<0.00078	11	<0.073	<0.00075	<0.152	<0.0008	<0.0012	<0.00066	100	100				

Table 1	Soil Analytical Data (mg/kg)														
Location:	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN						
Sample Name:	TT-018-G (0'-5')	TT-026-G (7'-9')	TT-039-G (3'-4')	TT-020-G (25'-27')	TT-035-G/14-16	TT-061-G/4-5	TT-028-G (3-4')	TT-056-G (1-5')	TT-017-G/3-5			(2)	(2)	(3)	(3)
Sample Depth:	0-5'	7-9'	3-4'	25-27'	14-16'	4-5'	3-4'	1-5'		2014 MCP	2014 MCP	Approved Reuse Levels	Approved Reuse Levels	DEP Published Background	DEP Published Background
Laboratory:	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha						
Laboratory I.D.:	L1902454-01/D,	L1902454-02	L1902454-03/D	L1902454-04	L1903964-02	L1903964-04	L1906644-01	L1906644-02	L1907670-02						
Sample Date:	01/10/2019	01/11/2019	01/11/2019	01/14/2019	01/17/2019	01/17/2019	02/19/2019	02/19/2019	02/26/2019	RCS-1 mg/kg ⁽¹⁾	RCS-2 mg/kg ⁽¹⁾	Unlined Landfill mg/kg	Lined Landfill mg/kg	Levels for Metals & PAHs Fill with Ash	Levels for Metals & PAHs Natural Soil
Consultant:	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech						
Map Grid:	4E	4E	4E	4E	3D	2E	3E	3D	4F						
Acenaphthene	<0.31	<0.17	3.7		<0.16	<0.332	<0.13	<0.14	<0.17	4	3,000			2	0.5
Acenaphthylene	0.3	<0.17	2.0		<0.16	<0.332	<0.13	<0.14	<0.17	1	10			1	0.5
Anthracene	0.5	<0.12	<1.95		<0.12	<0.332	<0.1	<0.1	<0.13	1,000	3,000			4	1
Benzo(a)anthracene	1.4	<0.12	<1.95		<0.12	<0.332	<0.1	<0.1	<0.13	7	40			9	2
Benzo(a)pyrene	1.2	<0.17	<1.95		<0.16	<0.332	<0.13	<0.14	<0.17	2	7			7	2
Benzo(b)fluoranthene	1.5	<0.12	<1.95		<0.12	<0.332	<0.1	<0.1	<0.13	7	40			8	2
Benzo(g,h,i)perylene	0.8	<0.17	<1.95		<0.16	<0.332	<0.13	<0.14	<0.17	1,000	3,000			3	1
Benzo(k)fluoranthene	0.5	<0.12	<1.95		<0.12	<0.332	<0.1	<0.1	<0.13	70	400			4	1
Chrysene	1.1	<0.12	<1.95		<0.12	<0.332	<0.1	<0.1	<0.13	70	400			7	2
Dibenzo(a,h)anthracene	<0.24	<0.12	<1.95		<0.12	<0.332	<0.1	<0.1	<0.13	0.7	4			1	0.5
Fluoranthene	2.4	<0.12	<1.95		<0.12	<0.332	<0.1	<0.1	<0.13	1,000	3,000			10	4
Fluorene	<0.39	<0.21	<1.95		<0.21	<0.332	<0.17	<0.18	<0.21	1,000	3,000			2	1
Indeno(1,2,3-cd)pyrene	0.9	<0.17	<1.95		<0.16	<0.332	<0.13	<0.14	<0.17	7	40			3	1
Methylnaphthalene, 2-	<0.47	<0.25	<1.95		<0.25	<0.332	<0.2	<0.21	<0.26	0.7	80			1	0.5
Naphthalene	<0.39	<0.21	5.3		<0.21	<0.332	<0.17	<0.18	<0.21	4	20			1	0.5
Phenanthrene	1.4	<0.12	2.8		<0.12	<0.332	<0.1	<0.1	<0.13	10	1,000			20	3
Pyrene	2.0	<0.12	<1.95		<0.12	<0.332	<0.1	<0.1	<0.13	1,000	3,000			20	4
Acetophenone	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	1,000	10,000				
Aniline	<0.47	<0.25			<0.25		<0.2	<0.21	<0.26	1,000	10,000				
Bis(2-chloroethoxy)methane	<0.42	<0.22			<0.22		<0.18	<0.19	<0.23	500	5,000				
Bis(2-chloroethyl)ether	<0.35	<0.19			<0.19		<0.15	<0.16	<0.19	0.7	0.7				
Bis(2-chloroisopropyl)ether	<0.47	<0.25			<0.25		<0.2	<0.21	<0.26	0.7	0.7				
Bis(2-ethylhexyl)phthalate	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	90	600				
Chloroaniline, 4-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	1	3				
Chloronaphthalene, 2-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	1,000	10,000				
Chlorophenol, 2-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	0.7	100				
Di- <i>n</i> -butylphthalate	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	50	500				
Di- <i>n</i> -octylphthalate	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	1,000	10,000				
Dibenzofuran	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	100	1,000				
Dichlorobenzene, 1,2-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	9	30				
Dichlorobenzene, 1,3-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	1	40				
Dichlorobenzene, 1,4-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	0.7	4				
Dichlorobenzidine, 3,3-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	3	20				
Dichlorophenol, 2,4-	<0.35	<0.19			<0.19		<0.15	<0.16	<0.19	0.7	40				
Diethyl phthalate	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	10	200				
Dimethyl phthalate	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	0.7	50				
Dimethylphenol, 2,4-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	0.7	100				
Dinitrophenol, 2,4-	<1.9	<1			<1		<0.81	<0.84	<1	3	50				
Dinitrotoluene, 2,4-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	0.7	10				
Dinitrotoluene, 2,6-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	100	1,000				
Hexachlorobenzene	<0.24	<0.12			<0.12		<0.1	<0.1	<0.13	0.7	0.8				
Hexachlorobutadiene (hexachloro-1,3-butadiene)	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	30	100				
Hexachloroethane	<0.31	<0.17			<0.16		<0.13	<0.14	<0.17	0.7	3				
Isophorone	<0.35	<0.19			<0.19		<0.15	<0.16	<0.19	100	1,000				
Nitrobenzene	<0.35	<0.19			<0.19		<0.15	<0.16	<0.19	500	5,000				
Nitrophenol, 2-	<0.85	<0.45			<0.45		<0.36	<0.38	<0.46	100	1,000				
Nitrophenol, 4-	<0.55	<0.29			<0.29		<0.24	<0.25	<0.3	100	1,000				
Pentachlorophenol	<0.79	<0.42			<0.41		<0.34	<0.35	<0.43	3	10				
Phenol	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	1	20				
Trichlorobenzene, 1,2,4-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	2	70				
Trichlorophenol, 2,4,5-	<0.39	<0.21			<0.21		<0.17	<0.18	<0.21	4	600				
Trichlorophenol, 2,4,6-	<0.24	<0.12			<0.12		<0.1	<0.1	<0.13	0.7	20				
Total Polychlorinated Biphenyls (PCBs) ⁽⁷⁾	<0.039	<0.0398			<0.0397		<0.0325	<0.0343	<0.0416	1	4	2	2		

Table 1	Soil Analytical Data (mg/kg)														
Location:	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN	LYNN SEWER DESIGN						
Sample Name:	TT-018-G (0'-5')	TT-026-G (7'-9')	TT-039-G (3'-4')	TT-020-G (25'-27')	TT-035-G/14-16	TT-061-G/4-5	TT-028-G (3'-4')	TT-056-G (1-5')	TT-017-G/3-5						
Sample Depth:	0-5'	7-9'	3-4'	25-27'	14-16'	4-5'	3-4'	1-5'		2014 MCP	2014 MCP	(2) Approved Reuse Levels	(2) Approved Reuse Levels	(3) DEP Published Background	(3) DEP Published Background
Laboratory:	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha						
Laboratory I.D.:	L1902454-01/D,	L1902454-02	L1902454-03/D	L1902454-04	L1903964-02	L1903964-04	L1906644-01	L1906644-02	L1907670-02	RCS-1	RCS-2	Unlined	Lined	Levels for	Levels for
Sample Date:	01/10/2019	01/11/2019	01/11/2019	01/14/2019	01/17/2019	01/17/2019	02/19/2019	02/19/2019	02/26/2019	mg/kg	mg/kg	Landfill	Landfill	Metals & PAHs	Metals & PAHs
Consultant:	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	Tetra Tech	(1)	(1)	mg/kg	mg/kg	Fill with Ash	Natural Soil
Map Grid:	4E	4E	4E	4E	3D	2E	3E	3D	4F						
Antimony, Total	<2.31	<2.52	<2.38		<2.41		<1.94	<2.12	<2.56	20	30	NA	NA	7	1
Arsenic, Total	13	1.8	1.2		2.2		2.5	2.9	13	20	20	40	40	20	20
Barium, Total	51	8.6	7.8		6.9		12	14	48	1,000	3,000	NA	NA	50	50
Beryllium, Total	<0.231	<0.252	<0.238		<0.241		<0.194	0.3	0.4	90	200	NA	NA	0.9	0.4
Cadmium, Total	<0.462	<0.504	<0.476		<0.482		<0.389	<0.424	<0.513	70	100	30	80	3	2
Chromium, Total	40	14	13		10		14	18	22	100	200	1,000	1,000	40	30
Copper, Total	35	4.8	4.8		4.4					1,000	10,000	NA	NA	200	40
Lead, Total	549	2.6	4.9		2.7		7.8	8.4	75	200	600	1,000	2,000	600	100
Mercury, Total ⁽⁶⁾	0.8	<0.080	<0.076		<0.078		<0.064	0.07	0.14	20	30	10	10	1	0.3
Nickel, Total	23	28	15		24		35	25	24	600	1,000	NA	NA	30	20
Selenium, Total	<2.31	<2.52	<2.38		<2.41		<1.94	<2.12	<2.56	400	700	NA	NA	1	0.5
Silver, Total	<0.462	<0.504	<0.476		<0.482		<0.389	<0.424	<0.513	100	200	NA	NA	5	0.6
Thallium, Total	<2.31	<2.52	<2.38		<2.41		<1.94	<2.12	<2.56	8	60	NA	NA	5	0.6
Vanadium, Total	29	8.6	7.5		5.6		8.0	13	23	400	700	NA	NA	30	30
Zinc, Total	92	16	13		17		22	18	76	1,000	3,000	NA	NA	300	100
TPH (Total Petroleum Hydrocarbons)	741	<39.8			<39.7		<32.8	<33.6	<41.1	1,000	3,000	2,500	5,000		
C ₉ -C ₁₈ Aliphatics			4,730			<6.65				1,000	3,000				
C ₁₉ -C ₃₆ Aliphatics			495			<6.65				3,000	5,000				
C ₁₁ -C ₂₂ Aromatics			2,120			<6.65				1,000	3,000				
C ₅ -C ₈ Aliphatics			595			<3.80				100	500				
C ₉ -C ₁₂ Aliphatics			614			<3.80				1,000	3,000				
C ₉ -C ₁₀ Aromatics			1,180			<3.80				100	500				
Cyanide, Reactive	<10	<10.			<10		<10	<10.	<10			(4)	(4)		
Ignitability	NI	NI			NI		NI	NI	NI			Not Ignitable ⁽⁵⁾	Not Ignitable ⁽⁵⁾		
Lead, TCLP	<0.50														
pH	7.8	7.4			7.5		8.4	7.6	7.8			2 to 12.5 ⁽⁵⁾	2 to 12.5 ⁽⁵⁾		
Solids, Total	84	79	83	80	80	96	97	93	77						
Specific Conductance	290	20			44							4,000	8,000		
Sulfide, Reactive	<10.	<10.			<10.		<10.	<10.	<10.			(4)	(4)		

Notes:

	Indicates the sample results demonstrates Class A-1 Soil
	Indicates the sample results demonstrates Class A-2 Soil
	Indicates the sample results demonstrates Class B-1 Soil
	Indicates the sample results demonstrates Class B-3 Soil

ND = Not Detected

NA = Not Applicable

⁽¹⁾ Source: Massachusetts Department of Environmental Protection (DEP) 310 CMR 40.0000 The Massachusetts Contingency Plan, 4/25/2014

⁽²⁾ Source: Massachusetts DEP Policy COMM-97-001 "Reuse of Contaminated Soil at Massachusetts Landfills", August 1997

⁽³⁾ Source: Massachusetts DEP Technical Update, Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil. May 2002. Values represent concentrations in soil containing coal ash or wood ash associated with fill material.

⁽⁴⁾ Cyanide or sulfide bearing waste does not generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment at pH conditions between 2 and 12.5 [40 CFR Ch.1 §261.23]

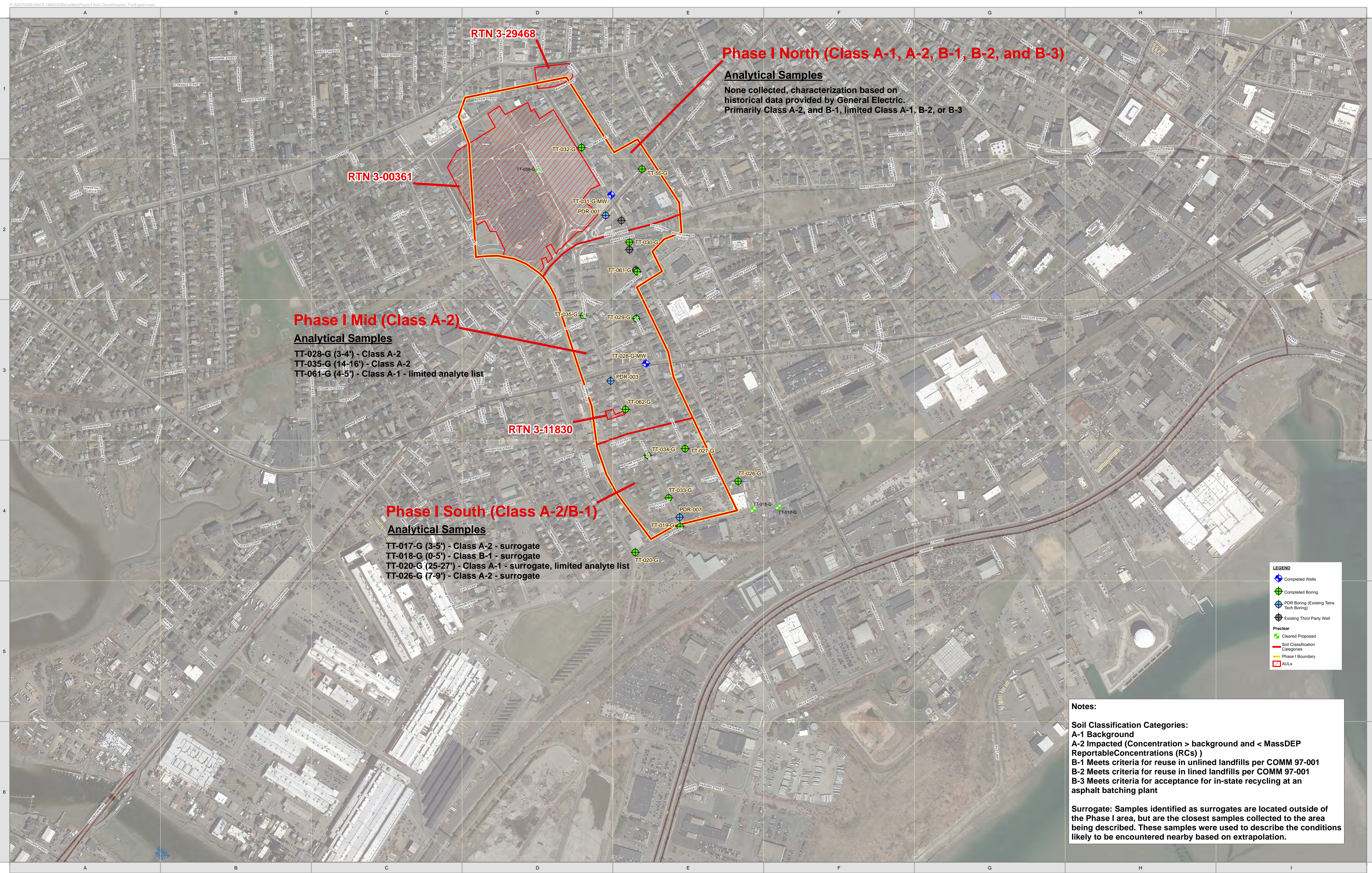
⁽⁵⁾ Source 40 CFR Ch.1 §261.21 to §261.24

Concentrations entered as < indicate that they were below the detection limit.

For compounds detected at least once above the detection limit, samples reported as not detected (ND) by the laboratory are assumed to have a concentration of one-half of the method detection limit for that sample in the average calculation.

⁽⁶⁾ Standards for Methyl Mercury are lower.

⁽⁷⁾ Standards apply to the sum of all PCBs.



Appendix A
Limitations

THIS PAGE INTENTIONALLY LEFT BLANK

LIMITATIONS

1. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the CLIENT. The work described in this report was carried out in accordance with the Terms and Conditions in our contract.
2. In preparing this report, ENGINEER has relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available to ENGINEER at the time of the site assessment. Although there may have been some degree of overlap in the information provided by these various sources, ENGINEER did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment.
3. Observations were made of the Site and of structures on the Site as indicated within the report. Where access to portions of the Site or to structures on the Site was unavailable or limited, ENGINEER renders no opinion as to the presence of hazardous materials or oil, or to the presence of indirect evidence relating to hazardous material or oil, in that portion of the Site or structure. In addition, ENGINEER renders no opinion as to the presence of hazardous material or oil, or the presence of indirect evidence relating to hazardous material or oil, where direct observation of the interior walls, floor, or ceiling of a structure on a Site was obstructed by objects or coverings on or over these surfaces.
4. ENGINEER did not perform testing or analyses to determine the presence or concentration of asbestos at the Site or in the environment at the Site.
5. It is ENGINEER's understanding that the purpose of this report is to assess the physical characteristics of the subject Site with respect to the presence on the Site of hazardous material or oil. This stated purpose has been a significant factor in determining the scope and level of services provided for in the Agreement. Should the purpose for which the Report is to be used or the proposed use of the site(s) change, this Report is no longer valid and use of this Report by CLIENT or others without ENGINEER's review and written authorization shall be at the user's sole risk. Should ENGINEER be required to review the Report after its date of submission, ENGINEER shall be entitled to additional compensation at then existing rates or such other terms as agreed between ENGINEER and the CLIENT.
6. The conclusions and recommendations contained in this report are based in part, where noted, upon the data obtained from a limited number of soil samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
7. Any water level readings made in test pits, borings, and/or observation wells were made at the times and under the conditions stated on the report. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.
8. Except as noted within the text of the report, no quantitative laboratory testing was performed as part of the site assessment. Where such analyses have been conducted by an outside laboratory, ENGINEER has relied upon the data provided and has not conducted an independent evaluation of the reliability of these data.

9. The conclusions and recommendations contained in this report are based in part, where noted, upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. As indicated within the report, some of these data may be preliminary screening level data and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed, and the conclusions and recommendations presented herein modified accordingly.
10. Chemical analyses have been performed for specific constituents during the course of this site assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the Site.
11. This Report was prepared for the exclusive use of the CLIENT. No other party is entitled to rely on the conclusions, observations, specifications, or data contained therein without the express written consent of ENGINEER.
12. The observations and conclusions described in this Report are based solely on the Scope of Services provided pursuant to the Agreement. ENGINEER has not performed any additional observations, investigations, studies, or testing not specifically stated therein. ENGINEER shall not be liable for the existence of any condition, the discovery of which required the performance of services not authorized under the Agreement.
13. The passage of time may result in significant changes in technology, economic conditions, or site variations that would render the Report inaccurate. Accordingly, neither the CLIENT, nor any other party, shall rely on the information or conclusions contained in this Report after six months from its date of submission without the express written consent of ENGINEER. Reliance on the Report after such period of time shall be at the user's sole risk. Should ENGINEER be required to review the Report after six months from its date of submission, ENGINEER shall be entitled to additional compensation at then existing rates or such other terms as may be agreed upon between ENGINEER and the CLIENT.
14. ENGINEER has endeavored to perform its services based upon engineering practices accepted at the time they were performed. ENGINEER makes no other representations, express or implied, regarding the information, data, analysis, calculations, and conclusions contained herein.
15. The services provided by ENGINEER do not include legal advice. Legal counsel should be consulted regarding interpretation of applicable and relevant federal, state, and local statutes and regulations and other legal matters.

Appendix D

**Activity and Use Limitation – General Electric West
Lynn Site – RTN 3-00361**

THIS PAGE INTENTIONALLY LEFT BLANK

NOTICE OF ACTIVITY AND USE LIMITATION
AMENDMENT
AUGUST 10, 2012

Form 1082B

FIRST AMENDMENT TO NOTICE OF ACTIVITY AND USE LIMITATION
M.G.L. c. 21E, § 6 and 310 CMR 40.0000

Disposal Site Name: General Electric West Lynn Site
DEP Release Tracking No.(s): 3-0361

WHEREAS, a Notice of Activity and Use Limitation has been recorded with the Essex County Registry of Deeds in Book 16553 Page 429, and/or registered with the Land Registration Office of the Essex County Registry District as Document No. 372681. Said Notice of Activity and Use Limitation and any amendments thereto are collectively referred to herein as "Notice";

WHEREAS, said Notice sets forth limitations on use and activities, conditions and obligations affecting certain parcel(s) of land situated in Lynn, Essex County, Massachusetts with the buildings and improvements thereon, said land being more particularly bounded and described in Exhibit A attached hereto and made a part hereof ("Property"). Said limitations on use and activities are consistent with the terms of an Activity and Use Limitation Opinion ("AUL Opinion") dated 1 September 2000, signed and sealed by Thomas A. Krug, holder of a valid license issued by the Board of Registration of Waste Site Cleanup Professionals, pursuant to Massachusetts General Laws Chapter 21A, Sections 19-19J (the holder being referred to as "LSP") attached to the Notice of Activity and Use Limitation as Exhibit C and made a part thereof, in order to maintain at the Property a condition of No Significant Risk (such conditions and terms being defined in 310 CMR 40.0000); and

WHEREAS, the undersigned LSP, in accordance with Chapter 21E and the MCP, has issued and signed an AUL Opinion, dated August 1, 2012, and filed with DEP at its Northeast Regional Office under Release Tracking No. 3-0361, attached hereto as

Exhibit B and made a part hereof. Said AUL Opinion explains that the implementation of the following proposed changes in Site Activities and Uses at the Property will maintain a condition of No Significant Risk; and

NOW THEREFORE, in accordance with M.G.L. c. 21E and the MCP, the undersigned General Electric Company, of Schenectady, Schenectady County, New York, being the owner of the Property pursuant to deeds recorded with the Essex County Registry of Deeds in Book 1738, Page 331, Book 10062, Page 590, Book 2667, Page 403, Book 3732, Page 168, Book 3732, Page 171, Book 3732, Page 173, Book 3732, Page 170, Book 5351, Page 7, Book 4867, Page 374, Book 3428, Page 235, Book 3428, Page 27, Book 3428, Page 26, Book 3509, Page 316, Book 2667, Page 403, Book 5177, Page 332, Book 2494, Page 577, Book 5643, Page 659, Book 4701, Page 407, Book 5757, Page 340, Book 5852, Page 709, Book 7476, Page 449, Book 5817, Page 27, Book 2448, Page 13, Book 3104, Page 309, Book 3212, Page 541, Book 5566, Page 777, Book 3463, Page 152, Book 3436, Page 243, Book 3419, Page 193, Book 3423, Page 587, Book 3424, Page 337, Book 3237, Page 478, Book 3237, Page 479, Book 3233, Page 523, Book 5476, Page 541, Book 3434, Page 334, Book 3425, Page 584, Book 3428, Page 414, Book 3428, Page 412, Book 3426, Page 566, Book 3425, Page 583, Book 3423, Page 382, Book 3425, Page 120, Book 3427, Page 69, Book 3425, Page 584, Book 3425, Page 585, Book 3426, Page 566, Book 3425, Page 582, Book 3425, Page 583, Book 2445, Book 116, Book 4678, Page 114, Book 4816, Page 588, Book 4654, Page 368, Book 4654, Page 400, Book 4654, Page 406, Book 4654, Page 407 and/or Certificate of Title Nos. 16107, 30356, 3133, and 2487, issued by the Land Registration Office of the Essex County Registry District, hereby amends said Notice as follows:

Paragraph 1, "Activities and Uses Consistent with the AUL Opinion", is amended to read as follows:

- (i) Commercial or industrial use including but not limited to retail establishments, manufacturing, office buildings, medical buildings, hospitals, warehouses, parking lots and any other activities associated with commercial or industrial use involving buildings and appurtenances constructed and maintained in a manner consistent with the relevant obligations specified in Paragraph 3(iv), (v), (vi), and (vii) and except as specified in Paragraph 2;
- (ii) Use for a school, daycare facility, recreational facility, and any other activities associated with the presence of children on a daily basis for extended periods of time involving buildings and appurtenances including, but not limited, to playing surfaces, related to said uses constructed and maintained in a manner consistent with the relevant obligations specified in Paragraph 3 and except as specified in Paragraph 2;
- (iii) Excavation associated with emergency, short-term (less than one week) subsurface utility work;
- (iv) Excavation associated with non-emergency underground utility work

and/or building construction or maintenance work as long as such work is conducted in a manner consistent with Paragraph 3(vi) and (vii);

- (v) Construction of new buildings for the uses specified in Paragraph 1 and in a manner consistent with the relevant obligations specified in Paragraph 3 and except as specified in Paragraph 2;
- (vi) Such other activities or uses which, in the Opinion of an LSP, shall present no greater risk of harm to health, safety, public welfare or the environment than the activities and uses set forth in this Paragraph; and
- (vii) Such other activities and uses not identified in Paragraph 2 as being Activities and Uses Inconsistent with the AUL.

Paragraph 2, "Activities and Uses Inconsistent with the AUL Opinion", is amended to read as follows:

- (i) Residential uses;
- (ii) Use of the soil for growing fruits and vegetables for human consumption;
- (iii) Excavation associated with non-emergency underground utility work and/or building construction and maintenance work except as such work conducted in a manner consistent with Paragraph 3(vi) and (vii);
- (iv) Construction or occupation of any building in Area A as shown in Exhibit A-1 attached hereto and made a part hereof, other than in a manner consistent with the relevant obligations specified in Paragraph 3, including, but not limited to, Paragraph 3 (iv); and
- (v) Construction or occupation of any building in Areas B or C as shown in Exhibit A-1 attached hereto and made a part hereof, other than in a manner consistent with the relevant obligations specified in Paragraph 3 including, but not limited to, Paragraph 3(v).

Paragraph 3, "Obligations and Conditions Set Forth in the AUL Opinion", is amended to read as follows:

- (i) If the Property is used for the purposes specified in Paragraph 1(ii), soils must be covered by buildings, pavement, and/or landscaped areas with a minimum of three feet of clean fill and/or topsoil with marker layer above the underlying soil;
- (ii) If the Property is used for the purposes specified in Paragraph 1(ii), pavement and building foundations within the Site must be maintained in good condition to ensure that the underlying impacted soils remain inaccessible;

(iii) If the Property is used for the purposes specified in Paragraph 1(ii), pavement and/or building foundations within the Site must be repaired and/or replaced with a comparable barrier to prevent future exposures to underlying impacted soil following the completion of any activity which involves their removal or disturbance;

(iv) Prior to constructing or occupying a building in Area A as shown on Exhibit A-1, attached hereto and made a part hereof,: (a) a vapor intrusion evaluation must be conducted by an LSP in accordance with the standards for such evaluations set forth in the MCP and related guidance to determine whether vapor intrusion into the building as it is constructed or proposed to be constructed is expected and whether engineering controls (such as a vapor barrier or active or passive sub-slab depressurization system) (collectively **"Vapor Intrusion Mitigation System"** or **"VIMS"**) are needed to maintain a condition of No Significant Risk for occupants of the building with respect to potential exposure to vapors; and (b) if the conclusion of the vapor intrusion evaluation in (a) is that a VIMS is needed, the building shall be constructed or modified to include a VIMS that, after taking into account the size, nature, design and use of the structure, is designed and, if applicable, operated to maintain a condition of No Significant Risk for occupants of the building with respect to potential exposure to vapors. Any VIMS shall meet all applicable and appropriate industry engineering standards and guidelines, including but not limited to the MCP and related guidance, and shall satisfy all prudent design, construction, and installation practices followed by experts in the industry, in each case for the size, nature, design and use of the structure at the time of system installation. All evaluations, designs, and construction pursuant to this Paragraph 3(iv) shall be conducted under the direction of an LSP;

(v) Prior to constructing or occupying a building in Areas B or C as shown on Exhibit A-1, attached hereto and made a part hereof, the building shall be constructed or modified to include a VIMS that, after taking into account the size, nature, design and use of the structure, is designed and, if applicable, operated to maintain a condition of No Significant Risk for occupants of the building with respect to potential exposure to vapors. Any VIMS shall meet all applicable and appropriate industry engineering standards and guidelines, including but not limited to the MCP and related guidance, and shall satisfy all prudent design, construction, and installation practices followed by experts in the industry, in each case for the size, nature, design and use of the structure at the time of system installation and shall include subsequent indoor air testing. All evaluations, designs, construction, and testing pursuant to this paragraph shall be conducted under the direction of an LSP;

(vi) A Soil and Materials Management Plan must be prepared by an LSP and implemented prior to the commencement of any activity that is likely to **"disturb"** soil at the Property. For the purpose of this AUL, **"disturbing"** soils includes without limitation bringing soils to the surface or moving soils through

grading, drilling, excavating, removing, trenching, backfilling, stockpiling or other disturbance, including without limitation installation of utilities or subsurface features, construction of above-grade or sub-surface structures or otherwise. The Soil and Materials Management Plan must describe appropriate soil excavation, handling, storage, transport, and disposal procedures in accordance with the provisions of the MCP at 310 CMR 40.0030, et seq., and any other applicable requirements, and include a description of the engineering controls and air monitoring procedures necessary to ensure that workers and receptors in the vicinity are not affected by fugitive dust or particulates. On-site workers must be informed of the requirements of the Soil and Materials Management Plan, and the plan must be available on-site throughout the course of the project; and

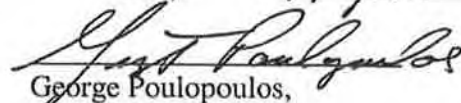
(vii) A Health and Safety Plan must be prepared by a Certified Industrial Hygienist or other qualified individual sufficiently trained in worker health and safety requirements and implemented prior to the commencement of any activity that is likely to "disturb" the soil at the Property. For the purpose of this AUL, "**disturbing**" soils includes without limitation bringing soils to the surface or moving soils through grading, drilling, excavating, removing, trenching, backfilling, stockpiling or other disturbance, including without limitation installation of utilities or subsurface features, construction of above-grade or sub-surface structures or otherwise. The Health and Safety Plan should clearly describe the location of the impacted soil and specifically identify any types of personal protective equipment, monitoring devices, and engineering controls necessary to ensure that workers are not exposed to Oil or Hazardous Materials in soil through dermal contact, ingestion, and/or the inhalation of particulate dusts. Workers who may come in contact with impacted soil at the Property must be informed of the location of contamination and all requirements of the Health and Safety Plan. The plan must be available on-site throughout the course of the project.

In all other respects the provisions of said Notice remain unchanged.



The General Electric Company authorizes and consents to the filing and recordation/and or registration of this First Amendment to Notice of Activity and Use Limitation, said First Amendment to become effective when executed under seal by the undersigned LSP and recorded and/or registered with the appropriate Registry of Deeds and/or Land Registration Office.

WITNESS the execution hereof under seal this 6th day of August, 2012


George Pouloupoulos,
Lynn Site Area Executive,
The General Electric Company

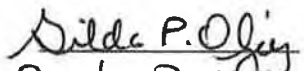
COMMONWEALTH OF MASSACHUSETTS

Essex, ss

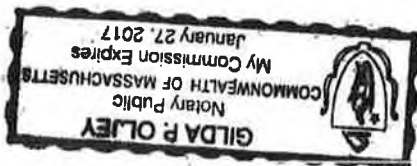
August 6, 2012

On this 6th day of August, 2012, before me, the undersigned notary public, personally appeared George Pouloupoulos, proved to me through satisfactory evidence of identification, which were Massachusetts Driver Lic., to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed it voluntarily for its stated purpose.

as Lynn Site Area Executive for General Electric Company, a corporation


 (official signature and seal of notary)
Gilda P. Olney

My Commission expires January 27, 2017



The undersigned LSP hereby certifies that he executed the AUL Opinion dated August 1, 2012 filed with DEP at its Northeast Regional Office under Release Tracking No. 3-0361, attached hereto as Exhibit B and made a part hereof, and that, in his Opinion, this First Amendment to Notice of Activity and Use Limitation is consistent therewith.

Date: August 9, 2012


Douglas Larson
[LSP SEAL]

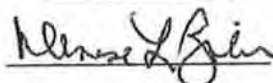
Middlesex
Essex, ss

COMMONWEALTH OF MASSACHUSETTS

Aug. 9, 2012

On this 9 day of August, 2012 before me, the undersigned notary public, personally appeared Douglas Larson, proved to me through satisfactory evidence of identification, which were personally known to me, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

as LSP for General Electric Company, a corporation

 (official signature and seal of notary)

Upon recording, return to:

General Electric Company
319 Great Oaks Office Park
Albany, New York 12203
Attn: John Uruskyj



EXHIBIT A

EXHIBIT A

A certain parcel of land with buildings thereon located between Centre Street and Spencer Street and between Waterhill Street and Western Avenue, in the City of Lynn, County of Essex, Commonwealth of Massachusetts, shown on a plan entitled "Activity and Use Limitation Plan of Land in Lynn, MA Property of General Electric Company" dated May 19, 2000, Scale 1"=60', prepared by Hancock Survey Associates, Inc., Danvers, Massachusetts, and recorded with Essex County Registry of Deeds (Southern District) in Plan Book 345, Plan 71, and being more particularly bounded and described as follows:

Beginning at a point on the southwesterly sideline of Centre Street at land of the City of Lynn, thence running;

- | | |
|---------------|---|
| S 58°25'45" W | By land of the City of Lynn, a distance of seventy-three and two hundredths (73.02) feet to a point, thence turning and running; |
| S 41°49'15" W | By land of the City of Lynn, a distance of eighty-eight and fifty-four hundredths (88.54) feet to a point, thence turning and running; |
| S 48°10'45" E | By land of the city of Lynn, a distance of one hundred fifty and zero hundredths (150.00) feet to a point on the northwesterly sideline of Western Avenue, thence turning and running; |
| S 41°49'15" W | By Western Avenue, a distance of one hundred eighty-three and eighty-three hundredths (183.83) feet to a point, thence turning and running; |
| Southwesterly | By Western Avenue, along a curve to the right with a radius of twenty eight and eighty-eight hundredths (28.88) feet, a length of forty-two and sixty-one hundredths (42.61) feet to a point, thence turning and running; |
| S 43°27'22" W | By Western Avenue, a distance of sixty-five and forty-six hundredths (65.46) feet to a point, thence turning and running; |
| S 47°46'18" W | By Western Avenue, a distance of one hundred three and eighty-two hundredths (103.82) feet to a point, thence turning and running; |

S 57°34'05" W	By Western Avenue, a distance of thirty-four and sixteen hundredths (34.16) feet to a point, thence turning and running;
S 39°33'35" W	By Western Avenue, a distance of forty-one and twenty-seven hundredths (41.27) feet to a point at land of Vargas Realty Trust, thence turning and running;
N 31°56'25" W	A distance of seventy-nine and seventy-seven hundredths (79.77) feet to a point, thence turning and running;
S 58°03'15" W	A distance of thirty-seven and zero hundredths (37.00) feet to a point, thence turning and running;
S 30°17'30" E	A distance of ninety-three and eight-hundredths (93.08) feet to the northwesterly sideline of Western Avenue, the previous three courses being by land of said Vargas Realty Trust, thence turning and running;
S 39°33'35" W	A distance of fifty-one and thirty-five hundredths (51.35) feet to land of Virginia Scanlon, thence turning and running;
N 24°32'50" W	A distance of forty-five and zero hundredths (45.00) feet to a point, thence turning and running;
S 65°28'04" W	A distance of forth and twenty-three hundredths (40.23) feet to a point, thence turning and running;
S 24°19'44" E	A distance of sixty-four and sixty-six hundredths (64.66) feet to a point on the northwesterly sideline of Western Avenue, the previous three courses being by land of said Scanlon, thence turning and running;
S 40°11'03" W	By Western Avenue, a distance of forty-eight and two hundredths (48.02) feet to a point, thence turning and running;
S 39°37'35" W	By Western Avenue, a distance of twenty-one and five hundredths (21.05) feet to a point at land now or formerly of the Boston & Maine Railroad; thence turning and running;

Northwesterly	By a curve to the left, having a radius of five hundred thirty-one and forty hundredths (531.40), a length of two hundred eighty-eight and seven-hundredths (288.07) feet to a point, thence turning and running;
S 24°35'20" E	A distance of four and zero hundredths (4.00) feet to a point, thence turning and running;
Northwesterly	By a curve to the left having a radius of five hundred twenty-eight and fifteen hundredths (528.15) feet, a length of one hundred sixty-two and twenty-eight (162.28) feet to a point on the northeasterly sideline of Spencer Street, the previous three courses being by land now or formerly of the Boston & Maine Railroad, thence turning and running;
N 25°48'44" W	By Spencer Street, a distance of one hundred sixty-two and ninety-eight hundredths (162.98) feet to land of the West Lynn Italian Civic Association, thence turning and running;
N 66°24'40" E	A distance of one hundred twenty-three and twenty-five hundredths (123.25) feet to a point, thence turning and running;
N 24°33'40" W	A distance of eighty-five and forty-two hundredths (85.42) feet to a point, thence turning and running;
S 66°27'20" W	A distance of one hundred twenty-five and twelve hundredths (125.12) feet to a point on the northeasterly sideline of Spencer Street, the previous three courses being by land of said West Lynn Italian Civic Association, thence turning and running;
N 25°48'44" W	By Spencer Street, a distance of one hundred ninety-six and ninety-three hundredths (196.93) feet to a point, thence turning and running;
N 27°37'40" W	By Spencer Street, a distance of three hundred eighty-five and seventy-one hundredths (385.71) feet to a point at land of Holiday Realty Corporation, thence turning and running;
N 65°15'59" E	A distance of forty-nine and four hundredths (49.04) feet to a point, thence turning and running;

N 28°08'12" W	A distance of seventy-four and sixty-three hundredths (74.63) feet to a point on the southeasterly sideline of Waterhill Street, the previous two courses being by land of Holiday Realty Trust, thence turning and running;
N 55°04'50" E	By Waterhill Street, a distance of five hundred eighty-two and thirty-six hundredths (582.36) feet to a point on the southwesterly sideline of Federal Street, thence turning and running;
S 33°23'20" E	By Federal Street, a distance of seventy-seven and thirty-three hundredths (77.33) feet to a point, thence turning and running;
N 62°57'30" E	By Federal Street and land of Zoraki Ahmed, a distance of one hundred sixty-four and fifty hundredths (164.50) feet to a point, thence turning and running;
N 65°12'00" E	By land of said Ahmed, a distance of thirty-two and thirty-five hundredths (32.35) feet to a point at land of James Nicholas, thence turning and running;
S 21°21'14" E	By land of said Nicholas, a distance of thirty-seven and eighty-nine hundredths (37.89) feet to a point, thence turning and running;
S 18°05'45" E	By land of said Nicholas, a distance of thirty-eight and seventy-one hundredths (38.71) feet to a point, thence turning and running;
N 40°14'30" E	By land of said Nicholas, a distance of thirty-one and ninety-eighty (31.98) feet to a point at land of Roger Mark Trust, thence turning and running;
S 31°10'48" E	By land of said Roger Mark Trust and land of KT Centre Street Trust, a distance of eighty-five and forty-two hundredths (85.42) feet to a point, thence turning and running;
N 58°22'46" E	By land of said KT Centre Street Trust, a distance of one hundred twenty-four and eighty-three hundredths (124.83) feet to a point in the southwesterly sideline of Centre Street, thence turning and running;

S 32°14'14" E

By Centre Street, a distance of two hundred twelve and four hundredths (212.04) feet to a point, thence turning and running;

S 31°34'15" E

By Centre Street, a distance of four hundred eighty-one and nineteen hundredths (481.19) feet to the point of beginning.

Said parcel contains 1,039,962 square feet more or less (23.8742± Acres) according to said plan.

EXHIBIT A-1

EXHIBIT B

EXHIBIT B

ACTIVITY AND USE LIMITATION OPINION

**The Former GE Facility
West Lynn Site
Lynn, Massachusetts
RTN 3-0361**

1. INTRODUCTION

Geosyntec Consultants, Inc. (Geosyntec) has prepared this Activity and Use Limitation (AUL) Opinion on behalf of The General Electric Company (GE). This AUL Opinion has been prepared in accordance with the provisions set forth in 310 CMR 40.1074(1)(b) and is submitted to the Massachusetts Department of Environmental Protection (MassDEP) as Exhibit B to Form 1082B, First Amendment to Notice of Activity and Use Limitation. This AUL Opinion is applicable to the property located at 40 Federal Street in Lynn, Massachusetts (hereafter referenced as the Former GE Facility) as defined in the Notice of AUL.

2. SITE HISTORY

The Former GE Facility has been used for a variety of manufacturing operations by GE and its predecessor, the Thomson-Houston Company, since 1882. Prior to 1985, GE's operations at the Former GE Facility involved the manufacture of electrical products.

Metal plating at the Former GE Facility involved the use of chemicals including acids, alkalis, solvents, cyanides and metallic solutions. These and other chemicals, in addition to chemical/process wastes, were stored in drums, aboveground storage tanks (ASTs) and underground storage tanks (USTs). The locations of drum storage, as well as locations, capacities, contents and removal status (where known) of the ASTs and USTs are summarized in the 1998 Phase II Report.

The majority of the buildings at the Former GE Facility were vacated in the 1950s and 1960s, when operations were consolidated into Buildings 101 through 109. The vacant buildings were demolished between 1970 and 1979 and the building foundations were filled in and paved over for use primarily as parking areas.

In 1985, operation of the Former GE Facility was transferred to GE Aircraft Engines. Following the transfer of operations to GE Aircraft Engines, a new building, Building 100, was constructed for the manufacturing of aircraft engine parts. All buildings other than Buildings 100 and 108 were demolished in 1995, and the Former GE Facility was paved. Currently, the Former GE Facility is inactive other than the groundwater treatment system operating in Building 108.

In 1988, the Former GE Facility was classified as a Non-Priority Disposal Site by the Massachusetts Department of Environmental Quality Engineering (DEQE), presently known as the MassDEP; DEQE issued a Waiver of Approvals for the Site under 310 CMR 40.537 in 1993. The MassDEP Release Tracking Number (RTN) for the Site is 3-0361. Different response

actions have been selected for different areas of the Site. These areas have been identified as Areas A, B, C, and D in the Revised Phase III Remedial Action Plan (RAP) and Completion Statement submitted to MassDEP in June 2012.

3. SITE CONDITIONS

The Former GE Facility is underlain by permeable fill and sandy beach deposits to an average depth of approximately 25 feet below ground surface (ft bgs). The sandy beach deposits become progressively finer with depth and eventually the deeper sediments transition to off-shore marine clays (Boston Blue Clay), which are up to approximately 90 feet (ft) thick beneath the Site.

Several contaminants of concern (COCs) are present in soil and groundwater beneath the Former GE Facility, including volatile organic compounds (VOCs), semi-VOCs, extractable and volatile petroleum hydrocarbons (EPH/VPH), pesticides and metals. Only VOCs have been identified to be migrating in soil gas and groundwater beyond the Former GE Facility boundaries. TCE is the most commonly detected COC. TCE appears to have migrated downward through the upper sandy soils to come to rest in the transition zone of interbedded silts, fine sands and clays. These soils have a relatively low permeability and small pore spaces that lead to strong capillary forces, so the TCE will have limited mobility in these soils.

A number of remediation activities have been completed to address the COCs present at the site. Soil vapor extraction (SVE) conducted periodically between 1990 and 2011 and groundwater extraction conducted between 1993 and 1998 have been used to remove TCE DNAPL mass from the site. A groundwater extraction and treatment system (GETS) was designed and implemented by Camp, Dresser & McKee in 1991 for treatment of TCE, and its operation continues to the present. In addition, a Product Only Recovery System (PORS) was operated from 1991 to 2006 to remove oil from the subsurface at a location near a former oil storage tank.

Based on results of environmental sampling and analysis, TCE continues to be the most frequently detected compound at the Site and has the highest concentration in samples of soil gas and groundwater. The concentrations of TCE in groundwater samples collected from monitoring wells at the Former GE Facility have generally declined since the fall of 2000.

The water table occurs at a depth of less than 15 ft bgs and forms a shallow unconfined aquifer which is not currently used for water supply. The existing buildings at the Former GE Facility, Building 100 and Building 108, are currently unoccupied, so groundwater at the Former GE Facility is not currently classified as GW-2; however, if these or other buildings were occupied in the future, groundwater within 30 feet of the buildings would be classified as GW-2. According to the Massachusetts Contingency Plan (MCP; see 310 CMR 40.0932(2)), by default, groundwater at all sites is considered to be a potential source of discharge to surface water and therefore the groundwater beneath the Former GE Facility is classified as GW-3. Research completed by Geosyntec indicates that groundwater at the Former GE Facility is not located in a current or potential drinking water source area and does not meet the MCP criteria (310 CMR 40.0932(4)) for groundwater classification as Category GW-1. It was confirmed that the Former GE Facility is:

- not within a current drinking water source area (CDWSA);

- not within a Zone II or Interim Wellhead Protection Area (IWPA);
- not within the Zone A4 of a Class A Surface Water Body;
- not above a medium-yield or high-yield potentially productive aquifer which may be used for potable water supply;
- not within 500 feet of a private water supply well; and
- is within 500 feet of a public water supply distribution pipeline.

No water supply wells have been identified within 500 feet of the Former GE Facility, nor is it located within 400 feet of a Class A Surface Water Body therefore, contact with constituents in groundwater through drinking water supplies is not a potential exposure pathway.

An AUL was implemented for the Former GE Facility on September 1, 2000. The AUL prohibited the following uses at the Former GE Facility:

- residential use;
- agricultural use;
- school, day care facilities, public libraries, nursing homes or other institutional uses;
- recreational use;
- use as a cemetery;
- use for food services; and
- use as a hospital.

Additionally, the AUL required that pavement, buildings, and clean soil layers in landscaped areas be maintained to prevent access to deeper soil and that new buildings not be constructed unless a Licensed Site Professional (LSP) first evaluates the potential risks associated with the use of such buildings.

The Risk Assessment presented in the Phase II Report and the Risk Assessment Addendum Letter concluded that current Site conditions posed a condition of No Significant Risk (NSR) to human health, welfare, public safety and the environment provided the conditions of the AUL were met. The Phase II Risk Assessment also concluded that operation of the GETS at the Former GE Facility may not be necessary to maintain a condition of NSR at the Site.

4. WHY THE NOTICE OF ACTIVITY AND USE LIMITATION IS APPROPRIATE TO MAINTAIN A CONDITION OF NO SIGNIFICANT RISK

The Method 3 Risk Assessment that was included in the Phase II Addendum Report concluded that a condition of NSR of harm to human health exists for current uses of the Former GE Facility based on the restrictions in the Notice AUL filed in 2000. The Phase II Addendum also concluded that an amendment to the 2000 AUL is warranted to: (1) remove the requirement for maintaining a soil cover at the Former GE Facility because the results of the updated Method 3 Risk Characterization indicate that this restriction is no longer needed to maintain a condition of NSR; and (2) add an obligation to evaluate the potential for vapor intrusion before constructing new buildings in the portion of the Former GE Facility where groundwater concentrations still

exceed Method 1 GW-2 standards (i.e., Areas B and C). An AUL Amendment is being filed with MassDEP in August 2012 to address the updated risk assessment conclusions.

The major findings of the Risk Characterization leading to the AUL amendment are summarized below:

1. Geosyntec calculated non-cancer hazards and cancer risk estimates for potential commercial/industrial workers and construction/utility workers at the Former GE Facility. The exposure scenarios for these receptor groups assumed that the soil cover requirement in the AUL was removed; therefore, exposure pathways associated with soil contact by future commercial/industrial workers were considered. Calculated risks for these receptor groups were below applicable MCP risk limits. Risk estimates were not calculated for adult and child visitors who would be expected to contact soil less frequently and intensely than commercial/industrial workers. Because a condition of NSR exists for commercial/industrial workers, a condition of NSR also exists for adult and child visitors.

Because the risk estimates for the current exposure scenarios evaluated did not exceed MCP risk limits, a condition of NSR of harm to human health exists for current uses of Areas A, B and C at the Former GE Facility. Additionally, a condition of NSR of harm to human health exists for potential future uses of Areas A and B in accordance with the 2000 AUL; however, the potential for vapor intrusion into new buildings in Area B should be evaluated before buildings are constructed in this area. A condition of NSR may not exist for foreseeable future uses of Area C. Future hypothetical risks are associated with: (1) potential vapor intrusion-related exposures in Building 108; and (2) exposure to impacted groundwater by construction workers. These hypothetical future exposure pathways will be re-evaluated if Building 108 is to be occupied, if a new building is proposed for construction, if construction work that intersects the water table is planned for Area C, and/or prior to filing a Permanent Solution Response Action Outcome Statement for Area C. Because risk estimates for soil contact by future commercial/industrial workers are below MCP risk limits, the conclusions of this Risk Characterization would be unchanged for an AUL that did not require the soils to remain covered at the Former GE Facility.

2. Based on observations made and information collected during environmental investigations of the Site, Site-related conditions do not currently and will not in the foreseeable future pose a threat of physical harm or bodily injury to people. Therefore, a condition of NSR of harm to safety exists at the Former GE Facility.
3. Average COC concentrations in soil and groundwater do not exceed the MCP Upper Concentration Limits (UCLs), and no community in the vicinity of the Former GE Facility experiences adverse impacts to public welfare under current conditions; therefore, a condition of NSR of Harm to public welfare exists at the Former GE Facility.
4. Based on the Stage I Environmental Screening conducted for the Former GE Facility, soil and groundwater conditions do not represent significant current exposures for environmental receptors, and a Stage II Environmental Risk Characterization is not

required. Based on the conservative comparisons made as part of the characterization of risk of harm to the environment, a condition of NSR to the environment exists at the Former GE Facility.

5. SITE ACTIVITIES AND USES INCONSISTENT WITH MAINTAINING A CONDITION OF NO SIGNIFICANT RISK

Activities and uses which are prohibited at the Property are those which, if implemented at the Site, may result in a significant risk of harm to health, safety, public welfare, or the environment. These activities and uses are as follows:

- (i) Residential uses;
- (ii) Use of the soil for growing fruits and vegetables for human consumption;
- (iii) Excavation associated with non-emergency underground utility work and/or building construction and maintenance work except as such work conducted in a manner consistent with Section 7(vi) and (vii);
- (iv) Construction or occupation of any building in Area A as shown in Exhibit A-1 and attached to the amended AUL, other than in a manner consistent with the relevant obligations specified in Section 7, including, but not limited to, Section 7 (iv); and
- (v) Construction or occupation of any building in Areas B or C as shown in Exhibit A-1 and attached to the amended AUL, other than in a manner consistent with the relevant obligations specified in Section 7 including, but not limited to, Section 7(v).

6. SITE ACTIVITIES AND USES TO BE PERMITTED

Activities and uses that are permitted at the Property are those for which, for any foreseeable period of time (pursuant to 310 CMR 40.0000), a condition of NSR of harm to health, safety, public welfare or the environment exists. These activities and uses include the following:

- (i) Commercial or industrial use including but not limited to retail establishments, manufacturing, office buildings, medical buildings, hospitals, warehouses, parking lots and any other activities associated with commercial or industrial use involving buildings and appurtenances constructed and maintained in a manner consistent with the relevant obligations specified in Section 7(iv), (v), (vi), and (vii) and except as specified in Section 5;
- (ii) Use for a school, daycare facility, recreational facility, and any other activities associated with the presence of children on a daily basis for extended periods of time involving buildings and appurtenances including, but not limited, to playing surfaces, related to said uses constructed and maintained in a manner consistent with the relevant obligations specified in Section 7 and except as specified in Section 5;

- (iii) Excavation associated with emergency, short-term (less than one week) subsurface utility work;
- (iv) Excavation associated with non-emergency underground utility work and/or building construction or maintenance work as long as such work is conducted in a manner consistent with Section 7(vi) and (vii);
- (v) Construction of new buildings for the uses specified in (i) and (ii) above and in a manner consistent with the relevant obligations specified in Section 7 and except as specified in Section 5;
- (vi) Such other activities or uses which, in the Opinion of an LSP, shall present no greater risk of harm to health, safety, public welfare or the environment than the activities and uses set forth in this Paragraph; and
- (vii) Such other activities and uses not identified in Section 5 as being Activities and Uses Inconsistent with the AUL.

7. OBLIGATIONS AND CONDITIONS NECESSARY TO MEET THE OBJECTIVES OF THE NOTICE OF ACTIVITY AND USE LIMITATION

The obligations and conditions necessary to maintain a condition of NSR include the following:

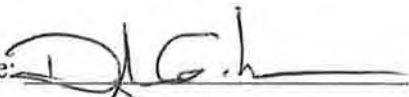
- (i) If the Property is used for the purposes specified in Section 6(ii), soils must be covered by buildings, pavement, and/or landscaped areas with a minimum of three feet of clean fill and/or topsoil with marker layer above the underlying soil;
- (ii) If the Property is used for the purposes specified in Section 6(ii), pavement and building foundations within the Site must be maintained in good condition to ensure that the underlying impacted soils remain inaccessible;
- (iii) If the Property is used for the purposes specified in Section 6(ii), pavement and/or building foundations within the Site must be repaired and/or replaced with a comparable barrier to prevent future exposures to underlying impacted soil following the completion of any activity which involves their removal or disturbance;
- (iv) Prior to constructing or occupying a building in Area A as shown on Exhibit A-1 and attached to the amended AUL: (a) a vapor intrusion evaluation must be conducted by an LSP in accordance with the standards for such evaluations set forth in the MCP and related guidance to determine whether vapor intrusion into the building as it is constructed or proposed to be constructed is expected and whether engineering controls (such as a vapor barrier or active or passive sub-slab depressurization system) (collectively “**Vapor Intrusion Mitigation System**” or “**VIMS**”) are needed to maintain a condition of NSR for occupants of the building with respect to potential exposure to vapors; and (b) if the conclusion of the vapor intrusion evaluation in (a) is that a VIMS is needed, the building shall be constructed or modified to include a VIMS that, after taking into account the

size, nature, design and use of the structure, is designed and, if applicable, operated to maintain a condition of NSR for occupants of the building with respect to potential exposure to vapors. Any VIMS shall meet all applicable and appropriate industry engineering standards and guidelines, including but not limited to the MCP and related guidance, and shall satisfy all prudent design, construction, and installation practices followed by experts in the industry, in each case for the size, nature, design and use of the structure at the time of system installation. All evaluations, designs, and construction pursuant to this Section 7(iv) shall be conducted under the direction of an LSP;

- (v) Prior to constructing or occupying a building in Areas B or C as shown on Exhibit A-1 and attached to the amended AUL, the building shall be constructed or modified to include a VIMS that, after taking into account the size, nature, design and use of the structure, is designed and, if applicable, operated to maintain a condition of NSR for occupants of the building with respect to potential exposure to vapors. Any VIMS shall meet all applicable and appropriate industry engineering standards and guidelines, including but not limited to the MCP and related guidance, and shall satisfy all prudent design, construction, and installation practices followed by experts in the industry, in each case for the size, nature, design and use of the structure at the time of system installation and shall include subsequent indoor air testing. All evaluations, designs, construction, and testing pursuant to this paragraph shall be conducted under the direction of an LSP;
- (vi) A Soil and Materials Management Plan must be prepared by an LSP and implemented prior to the commencement of any activity that is likely to “disturb” soil at the Property. For the purpose of the amended AUL, “disturbing” soils includes without limitation bringing soils to the surface or moving soils through grading, drilling, excavating, removing, trenching, backfilling, stockpiling or other disturbance, including without limitation installation of utilities or subsurface features, construction of above-grade or sub-surface structures or otherwise. The Soil and Materials Management Plan must describe appropriate soil excavation, handling, storage, transport, and disposal procedures in accordance with the provisions of the MCP at 310 CMR 40.0030, et seq., and any other applicable requirements, and include a description of the engineering controls and air monitoring procedures necessary to ensure that workers and receptors in the vicinity are not affected by fugitive dust or particulates. On-site workers must be informed of the requirements of the Soil and Materials Management Plan, and the plan must be available on-site throughout the course of the project; and
- (vii) A Health and Safety Plan must be prepared by a Certified Industrial Hygienist or other qualified individual sufficiently trained in worker health and safety requirements and implemented prior to the commencement of any activity that is likely to “disturb” the soil at the Property. For the purpose of the amended AUL, “disturbing” soils includes without limitation bringing soils to the surface or

moving soils through grading, drilling, excavating, removing, trenching, backfilling, stockpiling or other disturbance, including without limitation installation of utilities or subsurface features, construction of above-grade or subsurface structures or otherwise. The Health and Safety Plan should clearly describe the location of the impacted soil and specifically identify any types of personal protective equipment, monitoring devices, and engineering controls necessary to ensure that workers are not exposed to Oil or Hazardous Materials in soil through dermal contact, ingestion, and/or the inhalation of particulate dusts. Workers who may come in contact with impacted soil at the Property must be informed of the location of contamination and all requirements of the Health and Safety Plan. The plan must be available on-site throughout the course of the project.

LSP Signature:



Date: August 1, 2012

LSP Stamp:



EXHIBIT C



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC113A

ACTIVITY & USE LIMITATION (AUL) OPINION FORM

Pursuant to 310 CMR 40.1056 & 40.1070 - 40.1084 (Subpart J)

Release Tracking Number

3 - 361

A. DISPOSAL SITE LOCATION:

1. Disposal Site Name: GENERAL ELECTRIC CO

2. Street Address: 40 FEDERAL ST

3. City/Town: LYNN

4. ZIP Code: 01905-2212

B. THIS FORM IS BEING USED TO: (check one)

- ☐ 1. Provide the LSP Opinion for a **Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1074.
- ☐ 2. Provide the LSP Opinion for an **Evaluation of Changes in Land Uses/Activities and/or Site Conditions after a Response Action Outcome Statement**, pursuant to 310 CMR 40.1080. Include BWSC113A as an attachment to BWSC113. Section A and C do not need to be completed.
- ☒ 3. Provide the LSP Opinion for an **Amended Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1081(4).
- ☐ 4. Provide the LSP Opinion for a **Partial Termination of a Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1083(3).
- ☐ 5. Provide the LSP Opinion for a **Termination of a Notice of Activity and Use Limitation**, pursuant to 310 CMR 40.1083(1)(d).
- ☐ 6. Provide the LSP Opinion for a **Grant of Environmental Restriction**, pursuant to 310 CMR 40.1071.
- ☐ 7. Provide the LSP Opinion for an **Amendment of a Grant of Environmental Restriction**, pursuant to 310 CMR 40.1081(3).
- ☐ 8. Provide the LSP Opinion for a **Partial Release of a Grant of Environmental Restriction**, pursuant to 310 CMR 40.1083(2).
- ☐ 9. Provide the LSP Opinion for a **Release of a Grant of Environmental Restriction**, pursuant to 310 CMR 40.1083(1)(c).
- ☐ 10. Provide the LSP Opinion for a **Confirmatory Activity and Use Limitation**, pursuant to 310 CMR 40.1085(4).

(Unless otherwise noted above, all sections of this form (BWSC113A) must be completely filled out, printed, stamped, signed with black ink and attached as an exhibit to the AUL Document to be recorded and/or registered with the Registry of Deeds and/or Land Registration Office.)

C. AUL INFORMATION:

1. Is the address of the property subject to AUL different from the disposal site address listed above?

☒ a. No ☐ b. Yes If yes, then fill out address section below.

2. Street Address:

3. City/Town:

4. ZIP Code:



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC113A

ACTIVITY & USE LIMITATION (AUL) OPINION FORM

Pursuant to 310 CMR 40.1056 & 40.1070 - 40.1084 (Subpart J)

Release Tracking Number

3 - 361

D. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B indicates that a **Notice of Activity and Use Limitation** is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1074;

> if Section B indicates that an **Evaluation of Changes in Land Uses/Activities and/or Site Conditions after a Response Action Outcome Statement** is being submitted, this evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1080;

> if Section B indicates that an **Amended Notice of Activity and Use Limitation or Amendment to a Grant of Environmental Restriction** is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 40.1081;

> if Section B indicates that a **Termination or a Partial Termination of a Notice of Activity and Use Limitation, or a Release or Partial Release of a Grant of Environmental Restriction** is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1083;

> if Section B indicates that a **Grant of Environmental Restriction** is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1071;

> if Section B indicates that a **Confirmatory Activity and Use Limitation** is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1085(4);

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 8237

2. First Name: DOUGLAS G

3. Last Name: LARSON

4. Telephone: (978) 263-9588

5. Ext.: 774

6. FAX: (978) 263-9594

7. Signature: 

8. Date:

08/07/2012
mm/dd/yyyy

9. LSP Stamp:

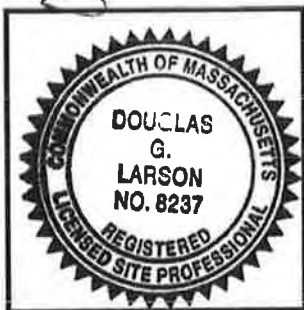


EXHIBIT D

R

PC-5

2012081000329 Bk:31611 Pg:214
08/10/2012 01:17 CERT Pg 1/1

CERTIFICATE

I, GEORGE PULTZ, Attesting Secretary of GENERAL ELECTRIC COMPANY, a corporation incorporated and existing under the laws of the State of New York, United States of America, do hereby certify that GENERAL ELECTRIC COMPANY is a corporation incorporated as of the fifteenth day of April, 1892, and existing under the laws of the State of New York, United States of America, having its registered office in Schenectady, New York, United States of America, and business offices in Lynn, Massachusetts, United States of America, and that GEORGE POULOPOULOS, Plant Manager, Boston Area Production Department, is authorized to act on behalf of GENERAL ELECTRIC COMPANY and execute the attached Activity and Use Limitation, pursuant to the current resolution of the Board of Directors of GENERAL ELECTRIC COMPANY.

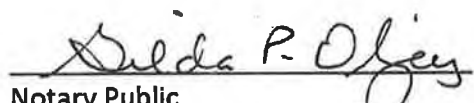
IN WITNESS WHEREOF, I have hereunto set my hand and caused the Corporate Seal of the Corporation to be affixed this third day of August, 2012.


Attesting Secretary

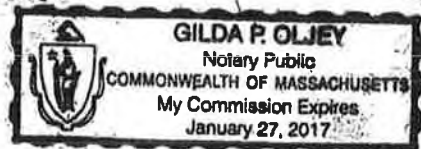
Seal


United States of America
State of Ohio
County of Hamilton, ss.

On this third day of August, 2012, before me came GEORGE PULTZ, to me known, and by me known to be the individual described herein and who executed the foregoing instrument and acknowledged to me that he executed the same.


Notary Public
My commission expires January 27, 2017

Seal




533344 (2487) Bch:302665
Southern Essex District Registry
8/10/2012 01:14 PM CERT Pg: 1/2

Document: 533345

AMEND&C

ESSEX SOUTHERN DISTRICT REGISTRY OF DEEDS

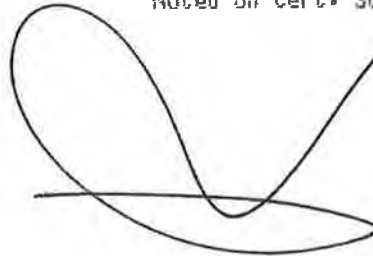
RECEIVED FOR REGISTRATION

On: 8/10/2012 01:46 PM

Document: 533344
CERT
ESSEX SOUTHERN DISTRICT REGISTRY OF DEEDS
RECEIVED FOR REGISTRATION
On: 8/10/2012 01:14 PM

Noted on Cert: 2487 BOOK: 10

Noted on Cert: 2487 BOOK: 10
Noted on Cert: 3133 BOOK: 13
Noted on Cert: 16107 BOOK: 65
Noted on Cert: 30356 BOOK: 130



COMMONWEALTH OF MASSACHUSETTS
LAND COURT
ESSEX REGISTRY OF DEEDS, SO. DIST.
SALEM, MASS

ESSEX S.S. *Aug 10* 20 *12*
A TRUE COPY OF DOCUMENT *533344*
ATTEST: *[Signature]*

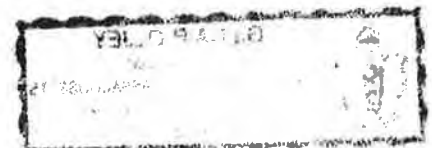
Assistant Recorder

COMMONWEALTH OF MASSACHUSETTS
ESSEX REGISTRY OF DEEDS, SO. DIST., SALEM, MASS
ESSEX SS *Aug 10* 20 *12*

A TRUE COPY OF RECORD:
BOOK *31611* PAGE *214*

ATTEST:

[Signature]
REGISTER



COMMONWEALTH OF MASSACHUSETTS
LAND COURT
ESSEX REGISTRY OF DEEDS, SO. DIST.
SALEM, MASS

ESSEX S.S.

A TRUE COPY OF DOCUMENT

ATTEST:

Aug 10 20 12
533345
[Signature]
Assistant Recorder

COMMONWEALTH OF MASSACHUSETTS
ESSEX REGISTRY OF DEEDS, SO. DIST. SALEM, MASS
ESSEX SS

A TRUE COPY OF RECORD:

BOOK *31611* PAGE

ATTEST:

Aug 10 20 12
544
[Signature]
REGISTER

NOTICE OF ACTIVITY AND USE LIMITATION

SEPTEMBER 8, 2000

Form 1075

NOTICE OF ACTIVITY AND USE LIMITATION

M.G.L. c. 21E, §6 and 310 CMR 40.0000

Disposal Site Name: General Electric West Lynn Site
DEP Release Tracking No.: 3-0361

This Notice of Activity and Use Limitation ("Notice") is made as of this 1st day of September, 2000, by General Electric Company, having its registered office in the City of Schenectady, Schenectady County, New York, together with its successors and assigns (collectively "Owner").

WITNESSETH:

WHEREAS, General Electric Company, is the owner in fee simple of those certain parcels of land located in Lynn, Essex County, Massachusetts, with the buildings and improvements thereon, pursuant to deeds recorded with the Essex County Registry of Deeds in Book 1738, Page 331, Book 10062, Page 590, Book 2667, Page 403, Book 3732, Page 168, Book 3732, Page 171, Book 3732, Page 173, Book 3732, Page 170, Book 5351, Page 7, Book 4867, Page 374, Book 3428, Page 235, Book 3428, Page 27, Book 3428, Page 26, Book 3509, Page 316, Book 2667, Page 403, Book 5177, Page 332, Book 2494, Page 577, Book 5643, Page 659, Book 4701, Page 407, Book 5757, Page 340, Book 5852, Page 709, Book 7476, Page 449, Book 5817, Page 27, Book 2448, Page 13, Book 3104, Page 309, Book 3212, Page 541, Book 5566, Page 777, Book 3463, Page 152, Book 3436, Page 243, Book 3419, Page 193, Book 3423, Page 587, Book 3424, Page 337, Book 3237, Page 478, Book 3237, Page 479, Book 3233, Page 523, Book 5476, Page 541, Book 3434, Page 334, Book 3425, Page 584, Book 3428, Page 414, Book 3428, Page 412, Book 3426, Page 566, Book 3425, Page 583, Book 3423, Page 382, Book 3425, Page 120, Book 3427, Page 69, Book 3425, Page 584, Book 3425, Page 585, Book 3426, Page 566, Book 3425, Page 582, Book 3425, Page 583, Book 2445, Page 116, Book 4678, Page 114, Book 4816, Page 588, Book 4654, Page 368, Book 4654, Page 400, Book 4654, Page 406, Book 4654, Page 407, and/or Certificate of Title Nos. 16107, 30356, 3133, and 2487, issued by the Land Registration Office of the Essex County Registry District;

WHEREAS, said parcels of land, which are more particularly bounded and described in Exhibit A, attached hereto and made a part hereof ("Property") are subject to this Notice of Activity and Use Limitation. The Property is shown on a plan recorded in the

MARGINAL REFERENCE REQUESTED
ALL BOOKS REF
BOOK PAGE

Essex County Registry of Deeds in Plan Book 345, Plan 71, and registered herewith in the Land Registration Office of the Essex County Registry District;

WHEREAS, the Property comprises part of a disposal site as the result of a release of oil and/or hazardous material. Exhibit B is a sketch plan showing the relationship of the Property subject to this Notice of Activity and Use Limitation to the boundaries of said disposal site existing within the limits of the Property and to the extent such boundaries have been established. Exhibit B is attached hereto and made a part hereof; and

WHEREAS, one or more response actions have been selected for the Disposal Site in accordance with M.G.L. c.21E ("Chapter 21E") and the Massachusetts Contingency Plan, 310 CMR 40.0000 ("MCP"). Said response actions are based upon (a) the restriction of human access to and contact with oil and/or hazardous material in soil and groundwater and/or (b) the restriction of certain activities occurring in, on, through, over or under the Property. The basis for such restrictions is set forth in an Activity and Use Limitation Opinion ("AUL Opinion"), dated September 1, 2000, (which is attached hereto as Exhibit C and made a part hereof);

NOW, THEREFORE, notice is hereby given that the activity and use limitations set forth in said AUL Opinion are as follows:

1. Activities and Uses Consistent with the AUL Opinion. The AUL Opinion provides that a condition of No Significant Risk to health, safety, public welfare or the environment exists for any foreseeable period of time (pursuant to 310 CMR 40.0000) so long as any of the following activities and uses occur on the Property:

- (i) Vehicular parking, pedestrian and vehicular traffic, and other activities and uses which: (a) do not compromise the structural integrity of the floor of the existing buildings, the pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds; and (b) do not disturb OHM-contaminated soil located directly beneath the floor of the buildings, pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds;
- (ii) Short term (three months or less) excavation, provided that it is conducted in accordance with Obligations and Conditions (i) and

(ii) in Paragraph 3 of this Notice of Activity and Use Limitation and that any pavement, building floors, lawn or the one foot thick layer of clean shallow soil material in the shrub beds that are disturbed in connection with such excavation are restored or replaced with a comparable exposure barrier immediately following the completion of the project;

- (iii) Industrial, commercial and institutional uses of buildings on the Property, with the exception of any industrial, commercial or institutional use specified in Paragraph 2(ii) of this Notice of Activity and Use Limitation, which: (a) do not compromise the structural integrity of the floor of the existing buildings, the pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds; and (b) do not disturb OHM-contaminated soil located directly beneath the floor of the buildings, pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds;
- (iv) Construction of new buildings, structures, or landscaping (lawn or shrub beds) or modifications to existing buildings, structures or landscaping provided that the potential risks associated with any such new buildings, structures, or landscaping are evaluated by a Licensed Site Professional (LSP) and determined to be consistent with maintaining a condition of No Significant Risk;
- (v) Such other activities and uses which, in the Opinion of an LSP, shall present no greater risk of harm to health, safety, public welfare, or the environment than the activities and uses set forth in this Paragraph; and
- (vi) Such other activities and uses not identified in Paragraph 2 as being Activities and Uses Inconsistent with the AUL.

2. Activities and Uses Inconsistent with the AUL Opinion. Activities and uses which are inconsistent with the objectives of this Notice of Activity and Use Limitation, and which, if implemented at the Property, may result in

a significant risk of harm to health, safety, public welfare or the environment or in a substantial hazard, are as follows:

- (i) Activities and/or uses which will: (a) disturb, cause physical or chemical deterioration, cause breakage, or compromise the integrity of the floor of the existing buildings, the pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds; or (b) disturb OHM-contaminated soil located directly beneath the floor of the buildings, pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds, without prior development and implementation of, and compliance with, a Soil and Materials Management Plan and a Health and Safety Plan in accordance with Obligations and Conditions (i) and (ii) in Paragraph 3 of this Notice of Activity and Use Limitation;
- (ii) The following land uses on the Property: (a) all residential uses; (b) all agricultural uses; and (c) churches or other places of worship, schools, day care facilities, public libraries, parks and recreation facilities, hospitals or nursing homes, clinics, cemeteries, and food services establishments;
- (iii) Construction of new buildings, structures, or landscaping (lawn or shrub beds) or modifications to existing buildings, structures or landscaping without an evaluation by an LSP of the potential risks associated with any such new buildings, structures, or landscaping, and a determination that such actions are consistent with maintaining a condition of No Significant Risk; and
- (iv) Relocation of the OHM-contaminated soil from beneath the pavement, the floors of buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds unless an LSP renders an Opinion which states that such relocation is consistent with maintaining a condition of No Significant Risk.

3. Obligations and Conditions Set Forth in the AUL Opinion. If applicable, obligations and/or conditions to be undertaken and/or maintained at the Property to maintain a condition of No Significant Risk as set forth in the AUL Opinion shall include the following:

- (i) A Soil and Materials Management Plan must be prepared by an LSP and implemented prior to the commencement of any activity that is likely to disturb the OHM-contaminated soil located beneath the pavement, building floor, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds. The Soil and Materials Management Plan must describe appropriate soil excavation, handling, storage, transport, and disposal procedures in accordance with the provisions of the MCP at 310 CMR 40.0030, et. seq., and any other applicable requirements and include a description of the engineering controls and air monitoring procedures necessary to ensure that workers and receptors in the vicinity are not affected by fugitive dust or particulates. On-site workers must be informed of the requirements of the Soil and Materials Management Plan, and the plan must be available on-site throughout the course of the project;
- (ii) A Health and Safety Plan must be prepared by a Certified Industrial Hygienist or other qualified individual sufficiently trained in worker health and safety requirements and implemented prior to the commencement of any activity which involves the removal and/or disturbance of the pavement, building floor, lawn, or the one foot thick layer of clean shallow soil material in the shrub beds and/or is likely to disturb the underlying OHM-contaminated soil or render it more accessible. The plan should clearly describe the location of the OHM-contaminated soil and specifically identify the types of personal protective equipment, monitoring devices, and engineering controls necessary to ensure that workers are not exposed to OHM through dermal contact, ingestion, and/or the inhalation of particulate dusts. Workers who may come in contact with OHM-contaminated soil within the Property must be informed of the location of the contamination and all requirements of the Health

and Safety Plan. The plan must be available on-site throughout the course of the project;

- (iii) No construction of new buildings, structures, or landscaping (lawn or shrub beds) or modifications to existing buildings, structures or landscaping may be commenced unless an LSP first evaluates the potential risks associated with the future use of any such new buildings, structures or landscaping and renders an Opinion that such uses are consistent with maintaining a condition of No Significant Risk;
- (iv) No relocation of the OHM-contaminated soil from beneath the pavement, the floors of buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds may be commenced unless an LSP first evaluates such activities and renders an Opinion which states that such relocation is consistent with maintaining a condition of No Significant Risk;
- (vi) The pavement, building floor, lawn, and one foot thick layer of clean shallow soil material in the shrub beds within the Property must be repaired and/or replaced with a comparable barrier to prevent future exposures to underlying OHM-contaminated soil immediately following the completion of any activity which involves its removal and/or disturbance;
- (vii) The pavement, building floor, lawn, or one foot thick layer of clean shallow soil material in the shrub beds must be maintained within the Property to ensure that the OHM-contaminated soil located beneath the pavement, building floor, lawn, or clean shallow soil in the shrub beds remains inaccessible; and
- (viii) Semi-annual inspections must be performed to confirm that the pavement, building floor, lawn, and the one foot thick layer of clean shallow soil material in the shrub beds is being properly maintained to prevent exposure(s) to OHM-contaminated subsurface soil, and documentation of these inspections must be reviewed by an LSP and maintained by the property owner for a period of seven years.

4. Proposed Changes in Activities and Uses. Any proposed changes in activities and uses at the Property which may result in higher levels of exposure to oil and/or hazardous material than currently exist shall be evaluated by an LSP who shall render an Opinion, in accordance with 310 CMR 40.1080 *et seq.*, as to whether the proposed changes will present a significant risk of harm to health, safety, public welfare or the environment. Any and all requirements set forth in the Opinion to meet the objective of this Notice shall be satisfied before any such activity or use is commenced.

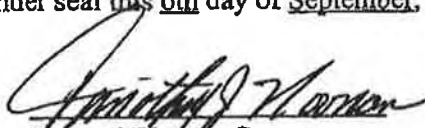
5. Violation of a Response Action Outcome. The activities, uses and/or exposures upon which this Notice is based shall not change at any time to cause a significant risk of harm to health, safety, public welfare, or the environment or to create substantial hazards due to exposure to oil and/or hazardous material without the prior evaluation by an LSP in accordance with 310 CMR 40.1080 *et seq.*, and without additional response actions, if necessary, to achieve or maintain a condition of No Significant Risk or to eliminate substantial hazards.

If the activities, uses, and/or exposures upon which this Notice is based change without the prior evaluation and additional response actions determined to be necessary by an LSP in accordance with 310 CMR 40.1080 *et seq.*, the owner or operator of the Property subject to this Notice at the time that the activities, uses and/or exposures change, shall comply with the requirements set forth in 310 CMR 40.0020.

6. Incorporation Into Deeds, Mortgages, Leases, and Instruments of Transfer. This Notice shall be incorporated either in full or by reference into all future deeds, easements, mortgages, leases, licenses, occupancy agreements or any other instrument of transfer, whereby an interest in and/or a right to use the Property or a portion thereof is conveyed.

Owner hereby authorizes and consents to the filing and recordation and/or registration of this Notice, said Notice to become effective when executed under seal by the undersigned LSP, and recorded and/or registered with the appropriate Registry of Deeds and/or Land Registration Office.

WITNESS the execution hereof under seal this 6th day of September, 2000.



General Electric Company
By: Timothy J. Noonan
Its: General Manager,
Lynn Area Production

COMMONWEALTH OF MASSACHUSETTS

Essex, ss

September 6, 2000

Then personally appeared the above named Timothy J. Noonan and acknowledged the foregoing to be his free act and deed before me,


Notary Public:
My Commission Expires:

Joan L. Poehler
NOTARY PUBLIC
My commission expires May 21, 2001

The undersigned LSP hereby certifies that he executed the aforesaid Activity and Use Limitation Opinion attached hereto as Exhibit C and made a part hereof and that in his Opinion this Notice of Activity and Use Limitation is consistent with the terms set forth in said Activity and Use Limitation Opinion.

Date: September 7, 2000

Thomas A. Krug
Thomas A. Krug, M.Sc., P.Eng., LSP



PROVINCE OF ONTARIO

Wellington County, ss

September 7, 2000

Then personally appeared the above named Thomas A. Krug and acknowledged the foregoing to be his free act and deed before me,

Anne S. Clarke
Notary Public: Anne S. Clarke
My Commission Expires: Does not expire

Upon recording, return to:

General Electric Company
320 Great Oaks Office Park
Albany, New York
12203
Attn: John Uruskyj

CERTIFICATE

I, WILLIAM V. KILLORAN, JR., Attesting Secretary of GENERAL ELECTRIC COMPANY, a corporation incorporated and existing under the laws of the State of New York, United States of America, do hereby certify that GENERAL ELECTRIC COMPANY is a corporation incorporated as of the fifteenth day of April, 1892, and existing under the laws of the State of New York, United States of America, having its registered office in Schenectady, New York, United States of America, and business offices in Lynn, Massachusetts, United States of America, and that TIMOTHY J. NOONAN, General Manager, Lynn Area Production Department, is hereby authorized to act on behalf of GENERAL ELECTRIC COMPANY and execute the attached Activity and Use Limitation, pursuant to the current resolution of the Board of Directors of GENERAL ELECTRIC COMPANY, dated April 26, 1988, revised December 21, 1991, and attached hereto.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Corporate Seal of the Corporation to be affixed this twenty-third day of August, 2000.


 William V. Killoran, Jr.
 Attesting Secretary

Seal

United States of America
 State of Ohio
 County of Hamilton, ss.

On this twenty-third day of August, 2000, before me came WILLIAM V. KILLORAN, JR., to me known, and by me known to be the individual described herein and who executed the foregoing instrument and acknowledged to me that he executed the same.


 Notary Public
 My commission expires

Seal



JUNE E. TEBBE
 Notary Public, State of Ohio
 My Commission Expires Feb. 2, 2002

EXHIBIT A

A certain parcel of land with buildings thereon located between Centre Street and Spencer Street and between Waterhill Street and Western Avenue, in the City of Lynn, County of Essex, Commonwealth of Massachusetts, shown on a plan entitled "Activity and Use Limitation Plan of Land in Lynn, MA Property of General Electric Company" dated May 19, 2000, Scale 1"=60', prepared by Hancock Survey Associates, Inc., Danvers, Massachusetts, and recorded with Essex County Registry of Deeds (Southern District) in Plan Book 345, Plan 71, and being more particularly bounded and described as follows:

Beginning at a point on the southwesterly sideline of Centre Street at land of the City of Lynn, thence running;

- | | |
|---------------|---|
| S 58°25'45" W | By land of the City of Lynn, a distance of seventy-three and two hundredths (73.02) feet to a point, thence turning and running; |
| S 41°49'15" W | By land of the City of Lynn, a distance of eighty-eight and fifty-four hundredths (88.54) feet to a point, thence turning and running; |
| S 48°10'45" E | By land of the city of Lynn, a distance of one hundred fifty and zero hundredths (150.00) feet to a point on the northwesterly sideline of Western Avenue, thence turning and running; |
| S 41°49'15" W | By Western Avenue, a distance of one hundred eighty-three and eighty-three hundredths (183.83) feet to a point, thence turning and running; |
| Southwesterly | By Western Avenue, along a curve to the right with a radius of twenty eight and eighty-eight hundredths (28.88) feet, a length of forty-two and sixty-one hundredths (42.61) feet to a point, thence turning and running; |
| S 43°27'22" W | By Western Avenue, a distance of sixty-five and forty-six hundredths (65.46) feet to a point, thence turning and running; |
| S 47°46'18" W | By Western Avenue, a distance of one hundred three and eighty-two hundredths (103.82) feet to a point, thence turning and running; |

- S 57°34'05" W By Western Avenue, a distance of thirty-four and sixteen hundredths (34.16) feet to a point, thence turning and running;
- S 39°33'35" W By Western Avenue, a distance of forty-one and twenty-seven hundredths (41.27) feet to a point at land of Vargas Realty Trust, thence turning and running;
- N 31°56'25" W A distance of seventy-nine and seventy-seven hundredths (79.77) feet to a point, thence turning and running;
- S 58°03'15" W A distance of thirty-seven and zero hundredths (37.00) feet to a point, thence turning and running;
- S 30°17'30" E A distance of ninety-three and eight-hundredths (93.08) feet to the northwesterly sideline of Western Avenue, the previous three courses being by land of said Vargas Realty Trust, thence turning and running;
- S 39°33'35" W A distance of fifty-one and thirty-five hundredths (51.35) feet to land of Virginia Scanlon, thence turning and running;
- N 24°32'50" W A distance of forty-five and zero hundredths (45.00) feet to a point, thence turning and running;
- S 65°28'04" W A distance of forth and twenty-three hundredths (40.23) feet to a point, thence turning and running;
- S 24°19'44" E A distance of sixty-four and sixty-six hundredths (64.66) feet to a point on the northwesterly sideline of Western Avenue, the previous three courses being by land of said Scanlon, thence turning and running;
- S 40°11'03" W By Western Avenue, a distance of forty-eight and two hundredths (48.02) feet to a point, thence turning and running;
- S 39°37'35" W By Western Avenue, a distance of twenty-one and five hundredths (21.05) feet to a point at land now or formerly of the Boston & Maine Railroad; thence turning and running;

Northwesterly	By a curve to the left, having a radius of five hundred thirty-one and forty hundredths (531.40), a length of two hundred eighty-eight and seven-hundredths (288.07) feet to a point, thence turning and running;
S 24°35'20" E	A distance of four and zero hundredths (4.00) feet to a point, thence turning and running;
Northwesterly	By a curve to the left having a radius of five hundred twenty-eight and fifteen hundredths (528.15) feet, a length of one hundred sixty-two and twenty-eight (162.28) feet to a point on the northeasterly sideline of Spencer Street, the previous three courses being by land now or formerly of the Boston & Maine Railroad, thence turning and running;
N 25°48'44" W	By Spencer Street, a distance of one hundred sixty-two and ninety-eight hundredths (162.98) feet to land of the West Lynn Italian Civic Association, thence turning and running;
N 66°24'40" E	A distance of one hundred twenty-three and twenty-five hundredths (123.25) feet to a point, thence turning and running;
N 24°33'40" W	A distance of eighty-five and forty-two hundredths (85.42) feet to a point, thence turning and running;
S 66°27'20" W	A distance of one hundred twenty-five and twelve hundredths (125.12) feet to a point on the northeasterly sideline of Spencer Street, the previous three courses being by land of said West Lynn Italian Civic Association, thence turning and running;
N 25°48'44" W	By Spencer Street, a distance of one hundred ninety-six and ninety-three hundredths (196.93) feet to a point, thence turning and running;
N 27°37'40" W	By Spencer Street, a distance of three hundred eighty-five and seventy-one hundredths (385.71) feet to a point at land of Holiday Realty Corporation, thence turning and running;
N 65°15'59" E	A distance of forty-nine and four hundredths (49.04) feet to a point, thence turning and running;

- N 28°08'12" W A distance of seventy-four and sixty-three hundredths (74.63) feet to a point on the southeasterly sideline of Waterhill Street, the previous two courses being by land of Holiday Realty Trust, thence turning and running;
- N 55°04'50" E By Waterhill Street, a distance of five hundred eighty-two and thirty-six hundredths (582.36) feet to a point on the southwesterly sideline of Federal Street, thence turning and running;
- S 33°23'20" E By Federal Street, a distance of seventy-seven and thirty-three hundredths (77.33) feet to a point, thence turning and running;
- N 62°57'30" E By Federal Street and land of Zoraki Ahmed, a distance of one hundred sixty-four and fifty hundredths (164.50) feet to a point, thence turning and running;
- N 65°12'00" E By land of said Ahmed, a distance of thirty-two and thirty-five hundredths (32.35) feet to a point at land of James Nicholas, thence turning and running;
- S 21°21'14" E By land of said Nicholas, a distance of thirty-seven and eighty-nine hundredths (37.89) feet to a point, thence turning and running;
- S 18°05'45" E By land of said Nicholas, a distance of thirty-eight and seventy-one hundredths (38.71) feet to a point, thence turning and running;
- N 40°14'30" E By land of said Nicholas, a distance of thirty-one and ninety-eighty (31.98) feet to a point at land of Roger Mark Trust, thence turning and running;
- S 31°10'48" E By land of said Roger Mark Trust and land of KT Centre Street Trust, a distance of eighty-five and forty-two hundredths (85.42) feet to a point, thence turning and running;
- N 58°22'46" E By land of said KT Centre Street Trust, a distance of one hundred twenty-four and eighty-three hundredths (124.83) feet to a point in the southwesterly sideline of Centre Street, thence turning and running;

S 32°14'14" E By Centre Street, a distance of two hundred twelve and four hundredths (212.04) feet to a point, thence turning and running;

S 31°34'15" E By Centre Street, a distance of four hundred eighty-one and nineteen hundredths (481.19) feet to the point of beginning.

Said parcel contains 1,039,962 square feet more or less (23.8742± Acres) according to said plan.

[illegible]

REXING 060538

4-00000

STAN & SONS - 2475
CITYVIEW - 177
MERCER - 1

**ACTIVITY AND USE LIMITATION
PLAN OF LAND**

●

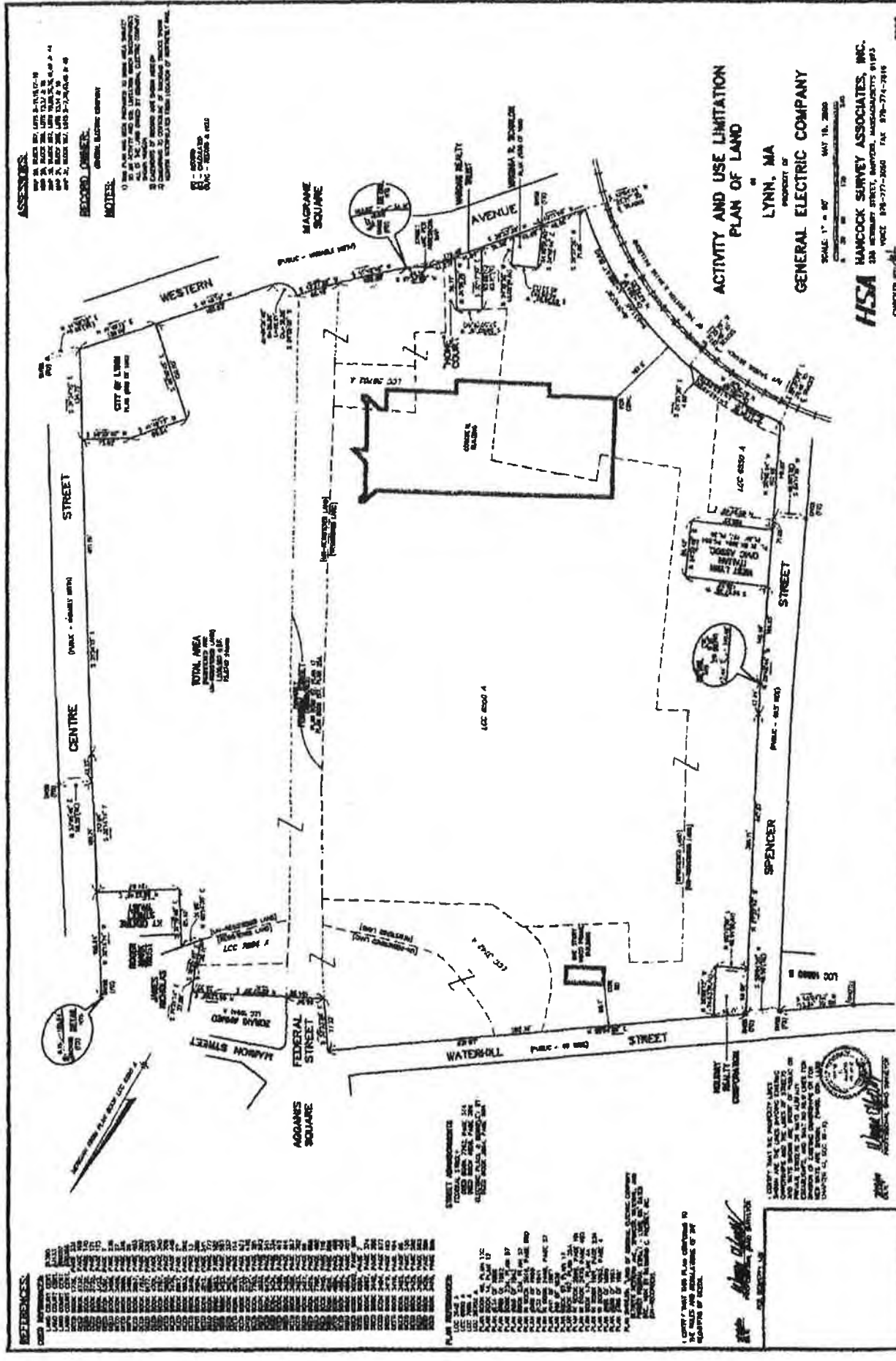
GENERAL ELECTRIC COMPANY

SCALE: 1" = 25'
MAY 18, 2000

HSA HANCOCK SURVEY ASSOCIATES, INC.
234 NEWBURY STREET, BOSTON, MASSACHUSETTS 01913
VOICE 617-277-3050 FAX 617-274-7816

五

UNION 



BK 16553 PG 445

EXHIBIT B

SKETCH PLAN

Exhibit B - Sketch Plan
West Lynn Property, Lynn, MA

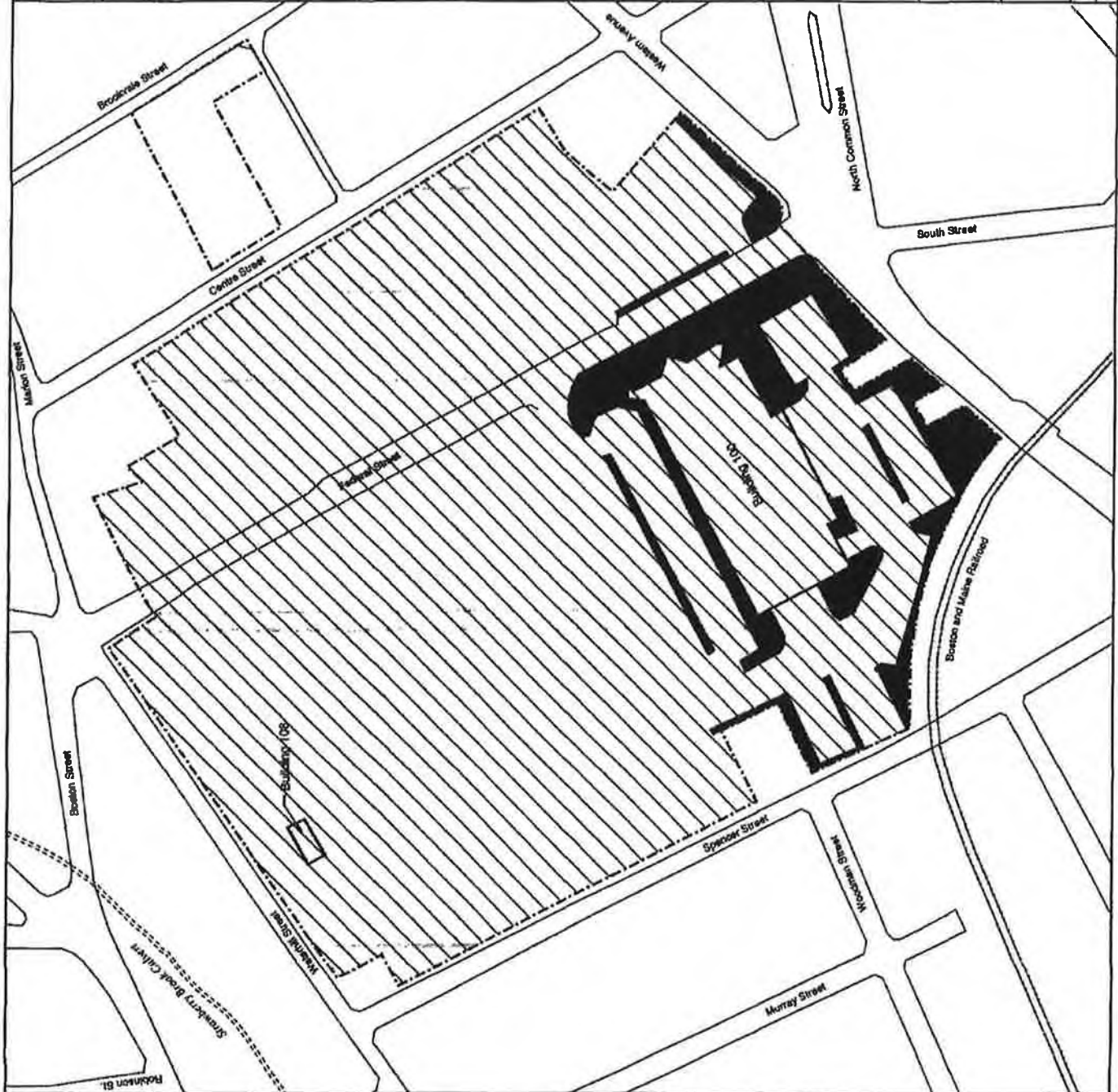


- Approach/Access Location of Lawn & Street Beds
- West Lynn Property
- Property Subject to AUL
- AUL - Activity and Use Limitation
- property line



GEOSYNTEC CONSULTANTS
GUELPH, ONTARIO

Project No.	TR0077	Figure No.	B-1
Date:	6 May 2000		



Land Provided: 18.00 +/- ac / 74,000 +/- sq ft

Legend: 00 4110

EXHIBIT C**ACTIVITY AND USE LIMITATION OPINION**

In accordance with the requirements of 310 CMR 40.1074, this Activity and Use Limitation Opinion has been prepared to support a Notice of Activity and Use Limitation for the General Electric (GE) West Lynn property (the "West Lynn Property" or "AUL Area") bounded by Spencer Street, Waterhill Street, Center Street, Western Avenue and the Boston and Maine Railroad located at 40 Federal Street, Lynn, Massachusetts (DEP Release Tracking Number 3-0361). The AUL Area is shown on the Sketch Plan attached as Exhibit B to the Notice of AUL. The AUL Area is either paved, beneath a building with a concrete slab on grade construction, beneath a lawn, or covered with clean shallow soil material in shrub beds.

Site History

The West Lynn Property is located approximately 10 miles north of Boston in the western portion of the City of Lynn, Massachusetts, within an urban area of mixed residential and commercial/industrial land use. At the time of the recording of this AUL, the AUL Area is zoned for Heavy Industrial use.

Soil and groundwater at the West Lynn Property contain oil or hazardous materials (OHM) which are attributable to releases during historic activities. These OHM releases have resulted in classification of the West Lynn Property as a "disposal site" according to MGL Chapter 21E, which required that GE conduct the site investigations and appropriate remediation. The West Lynn Property was classified as a Non-Priority Disposal Site by the Massachusetts Department of Environmental Quality Engineering (DEQE) in 1988 (DEQE, 1988) and was issued a Waiver of Approvals under 310 CMR 40.537 on August 23, 1993 (DEP, 1993).

Investigations and interim remedial actions commenced at the West Lynn Property beginning in 1985, including: environmental investigations; an interpretation of the

nature, extent, fate and transport of the OHM released; a site-specific assessment of the potential risks to human health, safety, welfare and the environment as a result of the OHM releases; and several Interim Measures designed to reduce the concentrations of OHM in specific areas of the West Lynn Property and to reduce the potential for migration of OHM at the West Lynn Property. A Phase II Comprehensive Site Assessment Report (BEAK, 1998) was completed in February 1998 while the site was under the Waiver of Approvals. GE submitted applications for Tier II extensions (310 CMR 40.0630) in 1998 and 1999. The current Tier II extensions require submission of a Response Action Outcome (RAO) Statement by 9 September 2000.

The West Lynn Property is underlain by permeable fill and sandy beach deposits to an average depth of about 25 feet below ground surface (ft bgs). The water table occurs at a depth of less than 15 ft bgs and forms a shallow unconfined aquifer, which is not currently used for water supply and is classified by the Commonwealth of Massachusetts as a Non-Potential Drinking Water Supply Aquifer (NPDWSA) on the basis of population density and land use. Deeper sediments transition to off-shore marine clays (the Boston Blue Clay), which are up to about 90 feet (ft) thick beneath the West Lynn Property and act as an effective barrier to deeper chemical migration.

Subsurface investigations identified several types of OHM in soil and groundwater beneath the West Lynn Property, including volatile organic compounds (VOCs), semi-VOCs, petroleum hydrocarbons, pesticides and metals. The most commonly detected chemical is trichloroethene (TCE), a solvent used historically in degreasing. TCE is a dense, non-aqueous phase liquid (DNAPL), which can sink under the force of gravity below the water table until it encounters an impenetrable geologic layer, or is immobilized by capillary forces. At the West Lynn Property, residual DNAPL TCE appears to have migrated downward through the upper sandy materials becoming interspersed in the transition zone of interbedded silts, fine sands and clays. These materials have a relatively low permeability and small pore spaces which lead to strong

capillary forces, so the residual DNAPL TCE is not expected to be mobile.

In addition to the TCE at the West Lynn Property, petroleum hydrocarbons and a number of semi-VOCs and metals have been found in soil at different locations at the West Lynn Property. Benzo(a)pyrene and chromium have been found in soil at elevated concentrations and have been found to contribute to the potential unacceptable risks to human health under at least one of the exposure scenarios evaluated in the Method 3 Risk Assessment conducted for the Site (BEAK, 1998 and GeoSyntec, 2000).

A significant number of removal actions have taken place at the Site since 1985. These removal actions have included: soil excavation and off-Site disposal; removal of contaminated catch basin sediment; removal of underground and above ground storage tanks; removal of free phase oil from specific release locations; the operation of a groundwater extraction and treatment system; and the operation of soil vapor extraction systems.

The Groundwater Extraction and Treatment System was installed in 1991 to control the migration of dissolved VOCs in groundwater near the downgradient West Lynn Property boundaries. About 4,000 kilograms (kg) of TCE have been removed via groundwater extraction to date. The average concentration of TCE in the extracted groundwater and the mass removal rate from areas that still have an elevated concentration of TCE have generally stabilized, which indicates that the nature and distribution of TCE in groundwater is unlikely to change significantly in the near future.

Soil vapor extraction (SVE) systems were installed and operated in two areas of the West Lynn Property and operated as Interim Measures. In 1990, an SVE system was operated in an area immediately north of the intersection of Federal Street and Western Avenue. The SVE system removed approximately 25 pounds of TCE before the system was decommissioned. In 1994, a second SVE system was installed between Building 100 and

Spencer Street. A pilot test of this SVE system was conducted in 1994 and the system was operated for several months in 1996 and 1997. The operation of this SVE system removed a significant mass of TCE and reduced concentrations of VOCs in the unsaturated zone in the area.

Reason for Activity and Use Limitation

The Method 3 Site Specific Risk Assessment (BEAK, 1998) and the Risk Assessment Addendum to the Phase II Report (GeoSyntec, 2000) concluded that: (a) the current conditions at the West Lynn Property pose No Significant Risk to human health or the environment; (b) if soils at the West Lynn Property were accessible (i.e., not beneath a cover) there could be significant risks for construction workers, commercial or other full-time workers, and members of the public if allowed unrestricted access to the West Lynn Property; and (c) if no special precautions were taken to reduce exposures to subsurface soils during excavation activities at the West Lynn Property there could be unacceptable risk to construction workers. Therefore, in order to ensure that such exposures do not occur and that a condition of No Significant Risk is maintained for future activities and uses, an Activity and Use Limitation is necessary to restrict certain activities and uses of the West Lynn Property. The AULs described in this Opinion will prevent significant risks by taking measures to ensure that there are no unacceptable exposures (dermal contact, ingestion, dust inhalation) to OHM in soils during future use of the West Lynn Property.

Permitted Uses and Activities

- (i) Vehicular parking, pedestrian and vehicular traffic, and other activities and uses which: (a) do not compromise the structural integrity of the floor of the existing buildings, the pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds; and (b) do not disturb OHM-contaminated soil located directly beneath the floor of the buildings, pavement

around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds;

- (ii) Short term (three months or less) excavation, provided that it is conducted in accordance with Obligations and Conditions (i) and (ii) of this Opinion and that any pavement, building floors, lawn or the one foot thick layer of clean shallow soil material in the shrub beds that are disturbed in connection with such excavation are restored or replaced with a comparable exposure barrier immediately following the completion of the project;
- (iii) Industrial, commercial and institutional uses of buildings in the Property, with the exception of any industrial, commercial or institutional use specified in (ii) of the "Restricted Uses and Activities" section, which: (a) do not compromise the structural integrity of the floor of the existing buildings, the pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds; and (b) do not disturb OHM-contaminated soil located directly beneath the floor of the buildings, pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds;
- (iv) Construction of new buildings, structures, or landscaping (lawn or shrub beds) or modifications to existing buildings, structures or landscaping provided that the potential risks associated with any such new buildings, structures, or landscaping are evaluated by a Licensed Site Professional (LSP) and determined to be consistent with maintaining a condition of No Significant Risk;
- (v) Such other activities and uses which, in the Opinion of an LSP, shall present no greater risk of harm to health, safety, public welfare, or the environment than the activities and uses set forth in this Paragraph; and
- (vi) Such other activities and uses not identified in the "Restricted Uses and Activities" section below as being Activities and Uses Inconsistent with the AUL.

Restricted Uses and Activities

- (i) Activities and/or uses which will: (a) disturb, cause physical or chemical deterioration, cause breakage, or compromise the integrity of the floor of the existing buildings, the pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds; or (b) disturb OHM-contaminated soil located directly beneath the floor of the buildings, pavement around the buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds, without prior development and implementation of, and compliance with, a Soil and Materials Management Plan and a Health and Safety Plan in accordance with Obligations and Conditions (i) and (ii) of this Opinion;
- (ii) The following land uses in the Property: (a) all residential uses; (b) all agricultural uses; and (c) churches or other places of worship, schools, day care facilities, public libraries, parks and recreation facilities, hospitals or nursing homes, clinics, cemeteries and food services establishments;
- (iii) Construction of new buildings, structures, or landscaping (lawn or shrub beds) or modifications to existing buildings, structures or landscaping without an evaluation by an LSP of the potential risks associated with any such new buildings, structures, or landscaping, and a determination that such actions are consistent with maintaining a condition of No Significant Risk; and
- (iv) Relocation of the OHM-contaminated soil from beneath the pavement, the floors of buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds unless an LSP renders an Opinion which states that such relocation is consistent with maintaining a condition of No Significant Risk.

Obligations and Conditions

- (i) A Soil and Materials Management Plan must be prepared by an LSP and implemented prior to the commencement of any activity that is likely to disturb the OHM-contaminated soil located beneath the pavement, building floor, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds. The Soil and Materials Management Plan must describe appropriate soil excavation, handling, storage, transport, and disposal procedures in accordance with the provisions of the MCP at 310 CMR 40.0030, et. seq., and any other applicable requirements and include a description of the engineering controls and air monitoring procedures necessary to ensure that workers and receptors in the vicinity are not affected by fugitive dust or particulates. On-site workers must be informed of the requirements of the Soil and Materials Management Plan, and the plan must be available on-site throughout the course of the project;

- (ii) A Health and Safety Plan must be prepared by a Certified Industrial Hygienist or other qualified individual sufficiently trained in worker health and safety requirements and implemented prior to the commencement of any activity which involves the removal and/or disturbance of the pavement, building floor, lawn, or the one foot thick layer of clean shallow soil material in the shrub beds and/or is likely to disturb the underlying OHM-contaminated soil or render it more accessible. The plan should clearly describe the location of the OHM-contaminated soil and specifically identify the types of personal protective equipment, monitoring devices, and engineering controls necessary to ensure that workers are not exposed to OHM through dermal contact, ingestion, and/or the inhalation of particulate dusts. Workers who may come in contact with OHM-contaminated soil within the designated Property must be informed of the location of the contamination and all requirements of the Health and Safety Plan. The plan must be available on-site throughout the course of the project;

- (iii) No construction of new buildings, structures, or landscaping (lawn or shrub beds) or modifications to existing buildings, structures or landscaping may be commenced unless an LSP first evaluates of the potential risks associated with the future use of any such new buildings, structures or landscaping and renders an Opinion that such uses are consistent with maintaining a condition of No Significant Risk;
- (iv) No relocation of the OHM-contaminated soil from beneath the pavement, the floors of buildings, the lawn, or the one foot thick layer of clean shallow soil material in the shrub beds may be commenced unless an LSP first evaluates such activities and renders an Opinion which states that such relocation is consistent with maintaining a condition of No Significant Risk;
- (vi) The pavement, building floor, lawn, and one foot thick layer of clean shallow soil material in the shrub beds within the Property must be repaired and/or replaced with a comparable barrier to prevent future exposures to underlying OHM-contaminated soil immediately following the completion of any activity which involves its removal and/or disturbance;
- (vii) The pavement, building floor, lawn, or one foot thick layer of clean shallow soil material in the shrub beds must be maintained within the designated Property to ensure that the OHM-contaminated soil located beneath the pavement, building floor, lawn, or clean shallow soil in the shrub beds remains inaccessible; and
- (viii) Semi-annual inspections must be performed to confirm that the pavement, building floor, lawn, and the one foot thick layer of clean shallow soil material in the shrub beds is being properly maintained to prevent exposure(s) to OHM-contaminated subsurface soil, and documentation of these inspections must be reviewed by an LSP and maintained by the property owner for a period of seven years.

References

Beak International Incorporated (BEAK). 1998. Phase II Comprehensive Site Assessment Report for the GE West Lynn Facility, Lynn, MA. Report Prepared for General Electric Company. February 1998.

GeoSyntec Consultants International, Inc. (GeoSyntec). 29 August 2000 letter to Nancy Fitzpatrick of Massachusetts Department of Environmental Protection Re: DEP Case Number 3-0361, West Lynn Facility, 40 Federal Street, Lynn, MA. Risk Assessment Addendum to the Phase II Comprehensive Site Assessment Report.

Commonwealth of Massachusetts Department of Environmental Quality Engineering (DEQE). 1988. December 30, 1998 letter to GE re: Site Classification.

Commonwealth of Massachusetts Department of Environmental Protection (DEP). 1993. May 21, 1993 letter to GE re: DEP Case No. 3-0361 Waiver Application.

LSP:

Thomas A. Krug

Thomas A. Krug, M.Sc., P.Eng., LSP

DATE:

September 1, 2000

EXHIBIT D

BWSC-114

ACTIVITY & USE LIMITATION (AUL) OPINION FORM



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BK 16553 PG 457
BWSC-174

Release Tracking Number

3 - 0361

ACTIVITY & USE LIMITATION (AUL) OPINION FORM

Pursuant to 310 CMR 40.1070 - 40.1084 (Subpart J)

COMPLETE THIS FORM AND ATTACH AS AN EXHIBIT TO THE AUL DOCUMENT TO BE RECORDED AND/OR REGISTERED WITH THE REGISTRY OF DEEDS AND/OR LAND REGISTRATION OFFICE.

A. LOCATION OF DISPOSAL SITE AND PROPERTY SUBJECT TO AUL:

Disposal Site Name: General Electric West Lynn Site

Street: 40 Federal St.

Location Aid: North of Western Ave.

City/Town: Lynn

ZIP Code: 01910

Address of property subject to AUL, if different than above. Street: as above

City/Town: as above

ZIP Code: as above

B. THIS FORM IS BEING USED TO: (check one)

- ☒ Provide the LSP Opinion for a Notice of Activity and Use Limitation, pursuant to 310 CMR 40.1074 (complete all sections of this form).
- ☐ Provide the LSP Opinion for an Amended Notice of Activity and Use Limitation, pursuant to 310 CMR 40.1061(4) (complete all sections of this form).
- ☐ Provide the LSP Opinion for a Termination of a Notice of Activity and Use Limitation, pursuant to 310 CMR 40.1063(3) (complete all sections of this form).
- ☐ Provide the LSP Opinion for a Grant of Environmental Restriction, pursuant to 310 CMR 40.1071, (complete all sections of this form).
- ☐ Provide the LSP Opinion for an Amendment of Environmental Restriction, pursuant to 310 CMR 40.1081(3) (complete all sections of this form).
- ☐ Provide the LSP Opinion for a Release of Environmental Restriction, pursuant to 310 CMR 40.1063(2) (complete all sections of this form).

C. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

> If Section B indicates that a Notice of Activity and Use Limitation is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1074(1)(b);

> If Section B indicates that an Amended Notice of Activity and Use Limitation is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1060(1) and 40.1061(1);

> If Section B indicates that a Termination of a Notice of Activity and Use Limitation is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1063(3)(a);

> If Section B indicates that a Grant of Environmental Restriction is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1071(1)(b);

> If Section B indicates that an Amendment to a Grant of Environmental Restriction is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1080(1) and 40.1081(1);

> If Section B indicates that a Release of Grant of Environmental Restriction is being registered and/or recorded, the Activity and Use Limitation that is the subject of this submittal (i) is being provided in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (ii) complies with 310 CMR 40.1063(3)(a).

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

- ☐ Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

SECTION C IS CONTINUED ON THE NEXT PAGE.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC-114

ACTIVITY & USE LIMITATION (AUL) OPINION FORM

Pursuant to 310 CMR 40.1070 - 40.1084 (Subpart J)

Release Tracking Number

0361

C. LSP OPINION: (continued)

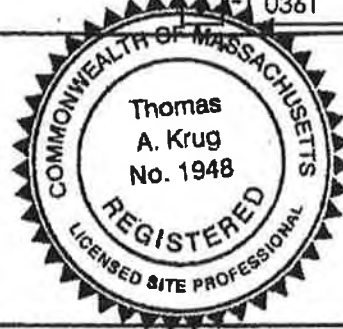
LSP Name: Thomas Krug LSP #: 1948 Stamp:

Telephone: 519-822-2230 Ext: 242

FAX: 519-822-3151

LSP Signature: Thomas A Krug

Date: September 1, 2000



YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS
FORM OR DEP MAY FIND THE DOCUMENT TO BE INCOMPLETE.

BK 16553 PG 458

COMMONWEALTH OF MASSACHUSETTS
LAND COURT
ESSEX REGISTRY OF DEEDS, SO. DIST.
SALEM, MASS

ESSEX S.S. *Aug 10* 20 *12*
A TRUE COPY OF DOCUMENT *372681*
ATTEST:

G. J. O'Rourke
Assistant Recorder

COMMONWEALTH OF MASSACHUSETTS
ESSEX REGISTRY OF DEEDS, SO. DIST. SALEM, MASS
ESSEX SS *Aug 10* 20 *12*
A TRUE COPY OF RECORD:
BOOK *1653* PAGE *429*
ATTEST:

G. J. O'Rourke
REGISTER

Appendix E
Supporting Documents Provided by General Electric

THIS PAGE INTENTIONALLY LEFT BLANK



Legend

- piezometer
- monitoring well
- soil gas probe
- property line
- inferred maximum extent of migration of chemicals from the Former GE Facility (extent of West Lynn Site)
- ROS Remedy Operating Status
- RAO Response Action Outcome
- AUL Activity and Use Limitation

- AREA A:** area eligible for a Class A-3 Permanent Solution RAO without vapor intrusion evaluation requirement in connection with construction of buildings in area.
- AREA B:** area eligible for a Class A-3 Permanent Solution RAO with vapor intrusion evaluation requirement in connection with construction of buildings in area.
- AREA C:** area under ROS with vapor intrusion evaluation requirement in connection with occupancy or construction of buildings in area.
- AREA D:** area under ROS without vapor intrusion evaluation requirement in connection with occupancy or construction of buildings in area.



Areas A, B, C and D at the West Lynn Site
Lynn, MA



Guelph July 2012

